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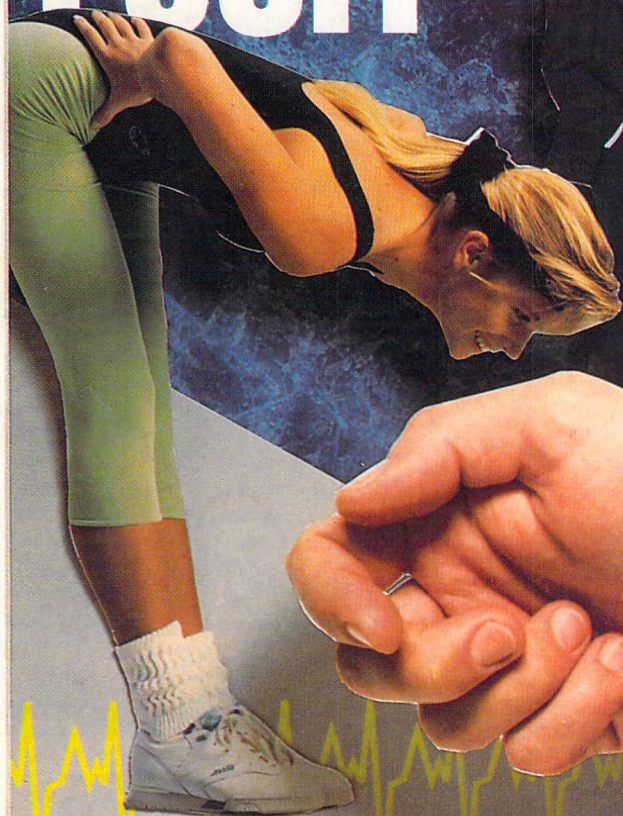
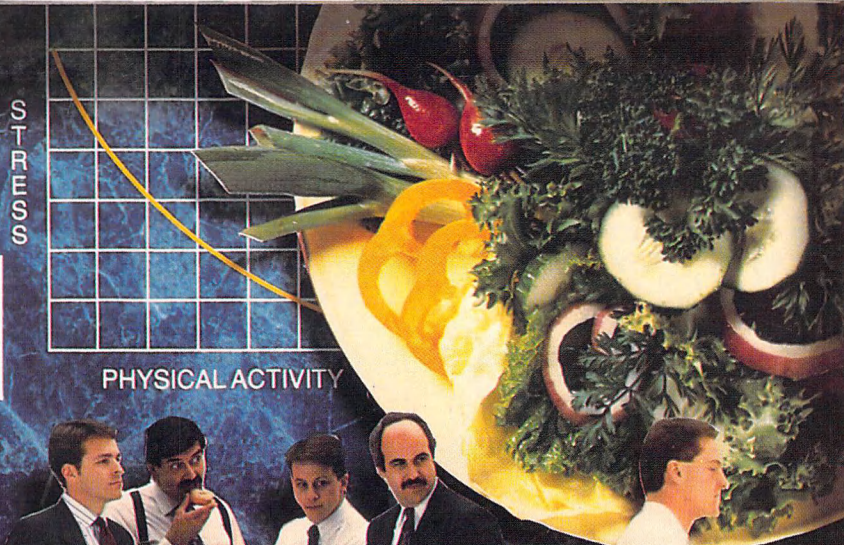
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M A G A Z I N E

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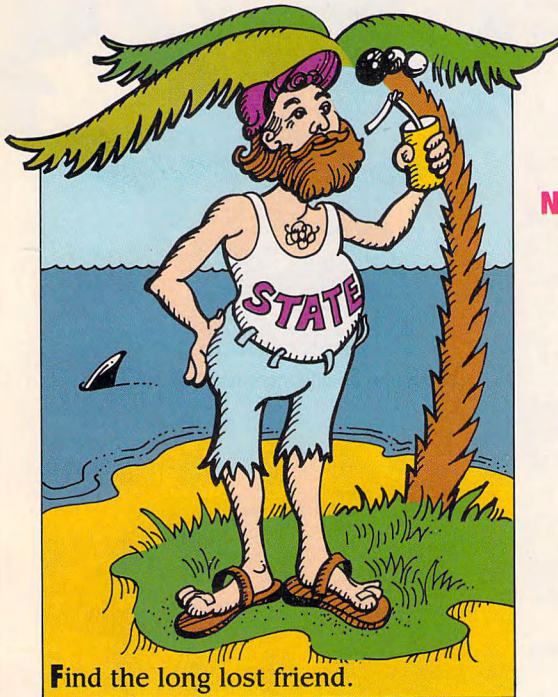
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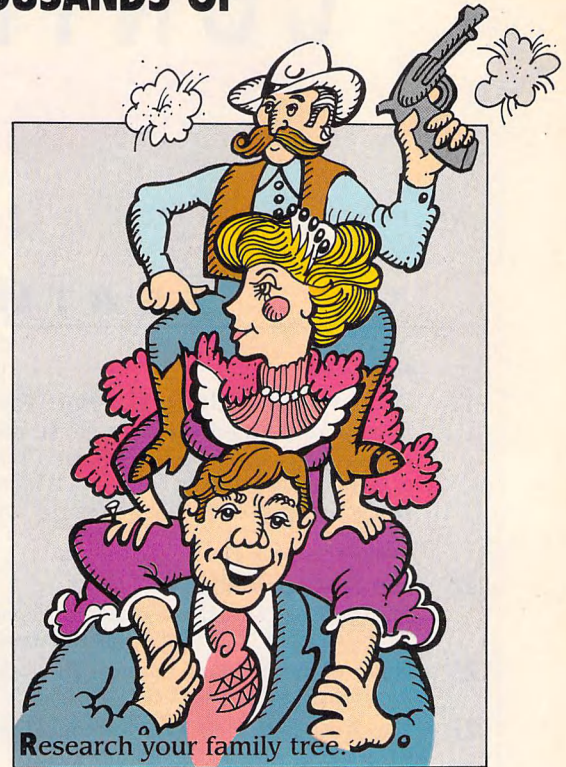
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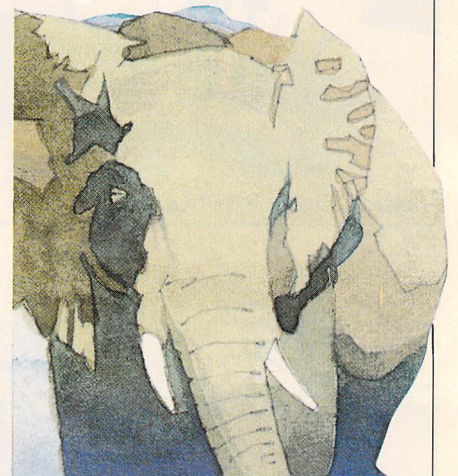
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Too Hot to Print

► Catch computer industry news as it happens, read special reports, commentary and more product reviews. You'll find it only in *Online Today*, a daily updated newspaper.

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COMPU SERVE

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Dear Reader

At this arbitrary "start again" time of year, many of us contemplate the means to attaining a healthier diet, better physical condition, more effective stress control, heightened intellectual or mental powers, and similar self-improvements. Sometimes we actually follow up on these good intentions and take action. Mostly we just contemplate. The health spa membership card and Jane Fonda tapes gather dust in the back of the drawer along with yellowed EST and Dianetics books and a few stray Tylenol and Valium tablets.

Despite all the "wellness" hype stemming from as far back as the 1970s, it's been estimated that today only 20 percent of us exercise regularly, a third of us are overweight and most of us ignore chronic health problems until a crisis point is reached. In the face of medical advances since the '70s, overall health—physical and mental—is only marginally better, and markedly worse in some respects.

As with any of a bezzillion other wellness-related articles floating around out there, this month's *CM* cover story on taking charge of your health ("Happy New You," page 12) can't do much to change individual attitudes or transform bonafide couch potatoes into dynamos. As Health and Fitness Forum manager Allan Stevens says, "Wellness is an individual's choice....Until people are willing to change voluntarily, nothing is going to help them."

But, it is that time of year, and if you're of a serious mind to set about improving yourself in some way, or if you're seeking new methods of managing a serious chronic illness, you'll find many excellent resources on CompuServe to help—even inspire (see Barbara Stone's personal story on page 18). Unlike rather narrow approaches through dogmatic books, tapes or "wellness gurus," the Information Service can arm you with a wide variety of information and provide contact with many experts espousing several viewpoints. You can inform and empower yourself, network with people in your situation, draw your own conclusions and lay down your own plan of attack.

We have not extensively covered health-oriented services on CompuServe in many months; as with most areas of the service, much has changed for the better in a relatively short time. There are a variety of new searchable health research services such as Health Database Plus (more than 45,000 articles from 162 technical and lay magazines and journals) and powerful new emotional support and information resources such as Health and Fitness, Cancer and Diabetes Forums. Newer resources join old (but also improved) standbys such as the Medical Forum, HealthNet, PaperChase, and others. We hope these services help you meet your personal wellness goals and contribute to a healthy and happy 1991.

* * *

The Information Service has been around since 1979, and as one might expect, some of the best and most venerated services on CompuServe date back to the earliest days. That means we've seen quite a few "10-year anniversaries" lately. Now, it's another CompuServe institution's turn in the limelight. The Micronetworked Apple Users Network—better known as MAUG—is celebrating its 10th year. The "24-hour manual of everything" has served hundreds of thousands of Apple and Mac users over the years, proffered advice and extended valuable support, provided countless enhancement programs, hosted board meetings, and offered it all up with that special Apple Zeitgeist.

Click and drag yourself back to page 22 for a look at the Apple decade on CompuServe and a phenomenon that has grown from a single forum 10 years ago to a baker's dozen today.

Douglas G. Branstetter
Editor



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Letters

S/Wizardry's SCED

We were happy to see our product, SCED, mentioned in "S/Wonderful What a Software Forum Can Do" (November 1990, p. 8), but there were some problems with the article.

SCED does not "provide instant copies of any screen display." Rather, it allows users of Lotus Manuscript to edit text screen images captured with Lotus' SCR utility prior to including those screen images in their documents. An important part of this editing is the ability to change display attributes (colors) to maximize the readability of the screen images, which Manuscript prints in black-and-white.

Finally, the number listed in the article is for technical inquiries and support. Orders may be placed directly by calling 800/336-6644.

Christopher Nelson, President
S/Wizardry, Ltd.
Troy, NY

Survival Guide

Thank you for the review of *The PC User's Survival Guide* (October 1990, p. 50). While the editing may not be perfect, we have worked to create a book to span many aspects of users' interests.

We will continue to update the work amidst the rapidly progressing tide of personal computer technology and benefits to all levels of users. Anyone creating a macro, writing an online script, using a batch file enhancer, or even learning 'C' should find some of the technical details very useful.

We hope those searching for much needed information and guidance will find the work priceless and will contact us directly if they want to see more or less of any aspect of the text.

Jim Aspinwall
San Jose, Calif.

Send a Letter

- OLT-30 **Letters to the Editor** main menu. Lists all departments.
- OLT-31 **Send a letter instructions.** Complete instructions on how to send a letter to the editor via the electronic service.
- OLT-32 **Read letters** from other OLT readers.
- OLT-33 **Send a letter** to the editor. You will receive prompts for each step in the process. Important Note: We cannot answer questions regarding the CompuServe Information Service through this service. If you have questions or problems, please use the Feedback service (GO FEEDBACK).

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MONITOR

When There are Babies to Adopt and Questions to be Answered

Whether your interest is adopting children from Romania or Iowa, the "Adoption Today" Section and Library (16) in the Issues Forum (GO ISSUES) is the place to turn for advice. Led by Christine Adamec, an adoptive parent and author of *There are Babies to Adopt* (an updated edition will be published this January by Zebra Books), the group probes such controversial, contemporary topics as interracial adoption, searching for birth parents, and drug-addicted babies.

Adamec provides members with information and counsel on

agencies, attorneys and search groups to help cut through the red tape that often adds great frustration to the adoption experience. "But we're more than just an information clearinghouse," Adamec says. "We are an electronic support group for prospective and adoptive parents, adoptive adults and birth parents. We can provide both a shoulder to cry on in those moments of frustration or a place to share the joys of finally obtaining custody of that long-awaited child."



MICHAEL MCLAUGHLIN

Holy Adult Comics! That's Obscene! Or Is It?

A spirited and wide-ranging debate on obscenity, censorship and the First Amendment recently occupied the minds and keyboards of devotees of the Comics/Animation Forum (GO COMICS).

The focus of the lively discussions was so-called "adult"

comics, which typically feature sexual subject matter in one form or another. Because the forum membership includes many comics professionals, some of whom create adult material, viewpoints tended to be expressed vociferously, to say the least.

Harkening back to the 1950s crackdown on comic books, one participant argued that a line must be drawn between what is and isn't obscene. Recent events, including the drive to put warning labels on record albums and to declare some rock music obscene, he suggested, should have the creators of adult comics thinking about that line and the possibility of another crackdown.

Forum manager Doug Pratt says adult comics evolved from the underground comics that were popular in the 1960s. The number of titles has grown rapidly over the last 10 years under

independent publishers.

He explains that the obscenity debate is typical of the Comics Forum. "Because we have strong participation by professionals, we tend to get into the issues deeply. Comics are like any other artistic pursuit, and we treat them that way. They're not greasy kids' stuff, as some

think they are."

In a regular feature called "The View From Olympus," in-depth, critical reviews of adult comics are uploaded to Library 12, "Adult Comics." That's also where you can find XXXENO.-THD, the message thread on obscenity and censorship.

You Can't Leave Home Without It

Credit cards today are far more than a means of postponing payment for one's purchases. Cash customers are finding it almost essential to have a card for shopping by mail, renting a car, or, in many places, obtaining a night's lodging when away from home.

CompuServe member Susan Allen was caught in this quandary of needing a card despite always purchasing with cash. She turned to the Investors' Forum (GO INVFORUM) for suggestions on where she might find a no-fee credit card. The resulting 34K of discussion and personal anecdotes, contained in Library 7, "Fin Plan/Taxes" (file CRCARD.THLD), is an excellent primer on what to look for in a card and issuing bank.

The bottom line, say forum members, is to shop for a credit or charge card as you would for any other item.



MANUEL KING

Faith, and the Laying on of Computer Hands

Months after an accident, I was still in awful pain and couldn't walk. Doctors told me to learn to cope with it. The CT and MRI scans showed two injuries—one common, one very uncommon. Doctors concentrated on the less serious injury, brushing off my questions about the serious one. Since they didn't know what it was, it couldn't be doing me harm, right? Even though tests showed nerve damage in the legs, they insisted I should be walking around and wasn't I, perhaps, faking?

Seven months passed and I was getting worse. I asked a friend

to put my computer on the floor so I could use it from my bed. Balancing the keyboard on my chest I dialed up MedLine through CompuServe's Paper Chase. I used a Boolean search to find the combination of the two injuries, not just the two separately. There it was on the screen: vindication and hope. The combination produced severe debilitation, pain, and loss of use of the legs. Looking up nonsurgical treatments was the magic. Four days after starting the prescription I could move my legs. Today, I can walk without crutches. Thank you, CompuServe, for a happy ending.

Jolie Bookspan
User ID 73207,3356
Philadelphia, Pa.

CompuServe Magazine invites CompuServe members to compete for \$50 of free connect time by writing a 200-word essay describing original uses for the Information Service.

Send essays to User ID 76004,3302. Please include your full name, address and User ID number. Watch for winning essays in Monitor.

Proud Defenders of the Wildlife

A venerable environmental organization is using CompuServe's communications capabilities to help advance its conservation goals.

The 68-year-old Izaak Walton League of America, whose charter describes it as a "defender of soil, air, woods, water and wildlife," provides information to members, environmental activists and the media on the Outdoors Forum (GO OUTDOORS).

"We use the forum to send out legislative alerts on a variety of conservation issues and to offer our views to the members of the Outdoor Writers Association of America who are active on the forum," says Marchant Wentworth, a League legislative representative based in Arlington, Va.

"For example, because we're heavily involved in lobbying Congress on acid rain and Clean Air Act issues, we upload our alerts to one of the libraries on the forum. This always results in calls and requests for more information."

Wentworth explains that being online on CompuServe is another communications tool for the staff of the 53,000-member environmental organization. "Any time you reach out to someone, as the League does on CompuServe, it tends to produce results."

Online environmental activity also can be found on the Network Earth Forum (GO EARTH).



ARTISTS ONLY



ARTISTS ONLY

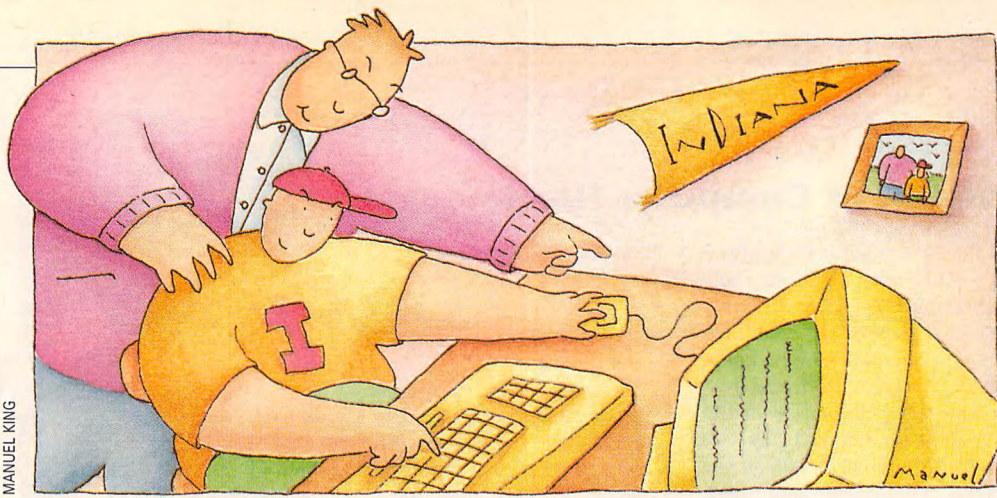
An Easy Pop of the Weasel

Many of today's highly advertised toys are designed with complicated switches and moving parts that test a child's manual dexterity and coordination. While most master these with minimal effort, those with physical or mental handicaps often become frustrated.

Biomedical engineer Steven Kanor has observed the problems encountered by children with limited ability to move the head, arms, or hands, and has created or adapted numerous toys with switches and communication devices. Catalog information for his frustration-free toys can be found in the Handicapped Users' Database (GO HUD). These include action slide toys; cars, trucks and trains; modified playhouse appliances; furry animals; and a selection of musical toys.

One of these delights is a jack-in-the-box. The traditional cumbersome crank has been replaced by a switch-activated motor. A happy tune plays, and then "PO!" goes Jack. Another is a colorful spinning musical top. Specially adapted with a motorized pulley, it requires no winding.

To reach the Kanor area of HUD directly, type GO HUD-6600.



This Buddy from Indiana Knows His Stuff

Computers in the classroom are commonplace these days, but a public-private financed partnership placing them in the student's home is quite another matter. "The Buddy System," now in its third year of operation in Indiana, has been expanded this aca-

demical year to involve some 900 fourth and fifth graders in 11 schools across the state.

"Our goal in this remarkable program," says Indiana Governor Evan Bayh, "is to increase parental involvement in the educational process, encourage students' technological under-

standing, supplement classroom instruction, and establish a base for Hoosiers to have lifelong learning opportunities."

Funded by grants from the Indiana Corporation for Science and Technology, the Indiana Department of Education, and several other organizations, the program, according to President Marvin Bailey, "has significantly increased the amount of time students spend on educational activities." This is being accomplished by inviting youngsters to explore a variety of practical applications including homework, online research, educational games, and interaction with fellow students and instructors.

To explore the increasing use of microcomputers and other high technologies in our schools and homes, visit the Education Forum (GO EDFORUM).

NIST on Integrity

The Computer Security Act of 1987 mandates that the federal government pay increased attention to the subject of computer system and data protection. In response, the National Institute of Standards and Technology (NIST) has prepared and is distributing a series of guides addressing issues such as viruses, data integrity, and general system security.

Three of the brochures focus on specific security questions posed by executives, managers and users; the fourth is intended to assist federal agencies in developing security training programs.

For additional information on the four NIST guides, make a modem call to the NIST bulletin board at 301/948-5717.

Right Door, Right Job

Trying to land a computer or high-tech job, but feel you're knocking at the wrong doors? The research division of Alexander Scott Associates, a Boston-based technology and engineering recruiting firm, can help.

The company matches a person's capabilities with the right employer using the Computer Professionals Employment Directory of New England, a database including more than 4,000 hiring managers and their areas of specialization. The information is continually updated with approximately 600 records revised during a typical month.

Under these circumstances,

a printed book or magazine-style directory would be impractical. "Thus it is offered as a custom-tailored report presenting our listings from any of 200 'skillcodes' in six major categories. The categories include software, hardware, communications engineering, MIS, quality assurance, and technical support and sales. Individuals are assured, when placing an order, that they will receive our most current information," says a company representative.

A personalized report costs \$50. For a brochure, contact Alexander Scott Associates, Inc., 150 Huntington Ave., Boston, MA 02115; 617/247-0042.

VDT Disease Link Unjustly Magnified?

Diseases and afflictions associated with video display terminals are a longstanding concern in the workplace. In a recent Health & Fitness (GO GOODHEALTH) Forum conference, Dr. Alan (alias "Bones") Ross, an internal medicine specialist, attempted to put things in perspective.

"There is some source for concern, but not much," says Ross. He notes that a majority of studies concerning the effects of VDTs on miscarriages, birth defects, and other accidents related to pregnancy "suggest that they are safe and do not increase the incidence of problems."

He is first to admit that this is a complicated issue as "VDTs are used in a variety of industries and under different circumstances." Therefore, someone employed in a nuclear power plant has more to fear than a counterpart working in a data entry position.

Ross' remarks, contained in Library 15, "Issues at Work," file VDTCON.TSX, question the VDT link with cancer and leukemia.

Finally, as for the eyes, Ross cites reports that point to some people, under certain circumstances, becoming temporarily myopic when exposed to a VDT for more than 10 hours a week. Here too, he warns, we must examine lighting conditions, screen luminance, contrast, and design of the workplace before solely blaming the video screen.

Monitor

Contributors:
Mike Pietruk, Cathryn Conroy,
Gary Plummer, Lindsay Van Gelder



MICHAEL MCLAUGHLIN

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Current Hits

by David Peyton

The libraries in CompuServe's forums are filled with thousands of files. The following are a few of the files uploaded in recent months. For a more up-to-date list, check the weekly "Uploads" columns in *Online Today* (GO OLT-3700). To locate a file that has been moved to another library, use the BROWSE command and a wildcard. For example, type BRO *.ARC at any forum prompt.

AI EXPERT FORUM

(GO AIXPERT)

HyperText Creator—HyperText version 1.62, a shareware HyperText package for MS-DOS. Requires color monitor. Use any ASCII text editor to create HyperText documents that allow you to link concepts/nodes via "buttons." Use buttons to fire external batch files, DOS files, run graphic programs, expert systems, sound effects, menus and more. Includes demo and manual. Registered Turbo Pascal users receive TPU files for their own programs. File HYPE16.ZIP (316,522 bytes) in Library 16, "Hypertext/Text."

AQUARIA/FISH FORUM

(GO FISHNET)

Aquatic Plants—A text file that describes the results of experiments growing aquatic plants indoors year-round as a supplement to outdoor pond growth. Particular attention is paid to specialized lighting requirements. File KP0011.TXT (5,206 bytes) in Library 9, "Koi/Fish Ponds."

ATARI PRODUCTIVITY FORUM

(GO ATARIPO)

Disk Cataloger—DBLIB, a database disk cataloging program, will print various sized labels directly from the database. This version has a built-in text editor capable of appending up to 65,000 bytes of information to each record, including passwords, software use and instructions. File DBLIBS.ARC (246,016 bytes) in Library 5, "Applications."

BORLAND APPLICATION FORUM

(GO BORAPP)

SideKick Utility—Phone Utility, a program to provide six functions for use with SideKick Plus phone book files, merges two phone books (with removal of most duplicates); selects records for output to a second phone book, and lists the index, name and phone number fields; dumps the 15 address fields in one of three formats; outputs labels and can change the case of all or selected text fields. The output can be redirected. Index ranges are selectable for SELECT, LIST, DUMP and LABELS. File PH-UTL.ZIP (20,096 bytes) in Library 2, "SideKick Plus."

COLOR COMPUTER FORUM

(GO COCO)

Adventure Game—A high seas adventure/simulation for the Color Computer in which you, as the captain of your own ship, must get a million dollars in the bank by sailing around the south seas buying and selling various commodities while avoiding pirates and other dangers. File TAIPAN.BAS (15,356 bytes) in Library 3, "Games." The same game for the CoCo 3 and a 40-column display monitor is TAIPAN.BAS (19,826 bytes) in Library 11, "CoCo 3."



COMPUTER CONSULTANTS FORUM

(GO CONSULT)

Expense Manager—A simple spreadsheet for expense management in Lotus 1-2-3 release 2.1 format. Keeps track of weekly business expenses and helps at tax time. Can be adapted for sole practice, contract or employee. Free. Donated by Dorothy Creswell, author. File XPENSE.ZIP (4,615 bytes) in Library 4, "Technical-Micros."

COOK'S ONLINE FORUM

(GO COOKS)

Recipe Reference—A program for MS-DOS systems that allows you to store and retrieve recipes the way you think about preparing food by meal, type of cuisine, chief ingredient, cookbook source and taste. System can be used to cite recipes in books and magazines or to store the recipe itself. Color monitor desirable but not necessary. File RECREP.ZIP (197,120 bytes) in Library 15, "Tools and Books."

DESKTOP PUBLISHING FORUM

(GO DTPFORUM)

Calendar Publisher—A program to compose and insert a monthly calendar into a desktop publishing project. File DTPCAL.ZIP (9,162 bytes) in Library 6, "DTP Utilities."

GAME CHALLENGE FORUM

(GO CHALFORUM)

Gin Rummy—Version 5.0 of Gin Rummy Challenge, featuring ZOOM mode of play for CGA/EGA/VGA. Play against the computer or play fast-paced telegames against other players via a phone-modem connection. Mouse and modem are optional. File RUMMYX.EXE (95,920 bytes) in Library 14, "Other Modem Games."

HYPERTEXT FORUM

(GO MACHYPER)

Environmental Directory—A self-extracting, comprehensive HyperCard listing of almost 150 national and local environmental, conservation, marine, mammal and animal rights organizations. Information includes address, phone number, purpose, membership fees and publications available. File GREEN (94,592 bytes) in Library 6, "Reference Stacks."

IBM APPLICATIONS FORUM

(GO IBMAPP)

Graphics Viewer—Version 2.60 of VUIMAGE, a GIF/TIFF Viewer/Printer. Zoom/Pan on huge images in 150K memory. Print full images to user-specified size. CGA/Hercules/EGA/ATT/MCGA/VGA/SupVGA/BIOS. Autodetect display, auto/manual video mode. Autoscale picture to fit screen, manual scale 1 to 999 percent. Menus, command line options. Dithered print/ 2-color modes. Select files by cursor/number. DOS error level/brightness adjust and more. File VUIMG2.ZIP (63,360 bytes) in Library 10, "Graphics [A]."

IBM BULLETIN BOARD FORUM

(GO IBMBS)

BBS System—EIS, a full-featured multinode BBS system, supports an unlimited number of message bases and file areas. EIS runs doors from 30 other BBS systems. Has support for 10 file-transfer protocols. Everything can be configured by the sysop. File EIS3D1.ZIP (129,882 bytes) in Library 1, "BBS Programs [B]."

IBM COMMUNICATIONS FORUM

(GO IBMCOM)

Area Code Finder—AC version 3.02B, an up-to-date area code finder, cross-references area codes, country codes, routing codes, two-letter state codes, cities and towns, states and provinces. From Pinnacle Software. File AC302.ZIP (46,080 bytes) in Library 2, "Comm Utilities."

IBM NEW USERS' FORUM

(GO IBMNEW)

Adventure Kit—TADS, the text adventure development system, is a programming tool for writing sophisticated, professional-quality text adventure games. The system consists of a compiler, a runtime module, a standard adventure game definitions file and the source for *Ditch Day Drifter*, a large sample game. The TADS language is C-like and object-oriented. No manual in this shareware version. File TADS.ARC (244,224 bytes) in Library 3, "Adventures."

MACINTOSH ENTERTAINMENT FORUM

(GO MACFUN)

A Bit of History—The most famous and popular computer game of all time, the *Original Adventure*, written at Stanford and MIT artificial intelligence labs, has been added to a forum library. Compiled for the Macintosh but preserving the original with no modifications. File ADVENT.SIT (126,336 bytes) in Library 3, "Adventure Games."



Glider Fun—Version 3 of *Glider+*, an arcade game for the Mac that puts you in the pilot's seat of a paper airplane. You glide through 15 rooms, riding hot-air drafts and avoiding various disasters. It's shareware from Soft Dorothy Software. File GLIDER.SIT (123,008 bytes) in Library 2, "Arcade/Action Games."

NAIC FORUM

(GO NAIC)

Total Investor—A Quattro Pro and Lotus 1-2-3 shareware template used to manage and analyze security portfolios. Combines multiple portfolio accounting, charting and technical analysis into a single integrated package. This version includes trading bands, a statistics window, Lotus 3.1 support and more. Information on the newly released Dow Jones/Retrieval Data Link is included. File TI123.ARC (163,172 bytes) in Library 12, "Investor Shareware."

Oldies but Goodies

by David Peyton

Following is a list of files uploaded to CompuServe forums more than a year ago that have won the right to be called "oldies but goodies," either by the recommendation of forum managers or by the number of downloads each file has received.

ADOBE FORUM

(GO ADOBE)

Graphics Converter—A packed file containing a utility that converts encapsulated PostScript (EPS) files to PICT files. Shareware. File EPSPIC.SIT (5,888 bytes) in Library 3, "Utilities."

ALDUS FORUM

(GO ALDUS)

Images—A total of 31 clip-art images in PCX format. Can be used with all popular desktop publishing packages. From autos to yachts and more. File CLIPAR.ARC (42,886 bytes) in Library 9, "Graphics/Clip Art."



AMIGA ARTS FORUM

(GO AMIGAARTS)

Conversion Package—Version 3.0 of Sliced HAM conversion package contains an interlaced converter for interlaced SHAM, and the normal converter for 220-line SHAM. Converts GIF pictures that aren't 320-by-200, converts GIF pictures that aren't 256 colors, includes interlaced converter for big pictures. File SHAM.ZOO (58,368 bytes) in Library 14, "Graphic Utilities."

APPLE PRODUCTIVITY FORUM

(GO APPRODUCT)

Utilities for Ilgs—Four utilities for the Ilgs by Diversified Software Research Inc. DVCACH.BNY (13,952 bytes) is a 3.5-inch disk-cache program for the Ilgs. Speeds up the disk access time and works with ProDOS, DOS and Pascal. DVCOPY.BNY (23,936 bytes) contains two disk copy programs for 3.5- and 5.25-inch drives. The 3.5-inch program will copy one pass on one drive. DVHACK.BNY (5760 bytes), a Ilgs CDA that allows access to the monitor through the control panel menu. DVKEY.BNY (57,088 bytes) is a keyboard macro program for the Ilgs. Can hold up to 10,000 macros in 320K of RAM. All programs are shareware. All in Library 8, "Utilities (Ilgs)."

ATARI PORTFOLIO FORUM

(GO APORTFOLIO)

Carriage Return Stripper—A program for automatically stripping hard carriage returns from ASCII files, as in transferring text files to your word processor via the Portfolio parallel interface. File STRIP.ARC (12,160 bytes) in Library 3, "Utilities."

ATARI PRODUCTIVITY FORUM

(GO ATARIPRO)

Period Table—A Periodic Table program and desk accessory. Click on an element and find its name, symbol, atomic number and weight, valences, melting and boiling points. Archived file contains both program and desk accessory versions. File PERIOD.ARC (30,202 bytes) in Library 5, "Applications."

COMMODORE ART/GAMES FORUM

(GO CBMART)

Doodle, Koala Viewer—CSLIDE, a program that will compress/uncompress and display Doodle and Koala pictures. File CSLIDE.BIN (2,304 bytes) in Library 10, "Graphics Util & GIF."

GAMERS FORUM

(GO GAMERS)

Extended ASCII Arcade Game—*Snipe*, an arcade game for IBM PCs and compatibles. Uses extended ASCII instead of graphics. File SNIPE.ZIP (8,704 bytes) in Library 7, "Action/Arcade Games."

GRAPHICS CORNER FORUM

(GO CORNER)

3-D Simulated Picture—An early winner in a revitalized Hall of Fame, this is a scan by the GrafX Group of a photo by Robb Debenport. Depicts some artist's brushes and equipment with superbly saturated colors, giving it an almost 3-D look. A GIF viewer capable of 640-by-480-by-256 colors is required. File PAINT.GIF (196,844 bytes) in Library 4, "Hall of Fame."

HAMNET FORUM

(GO HAMNET)

Clock Setter—NBSCOM, a program to set your computer's clock from the National Institute of Standards and Technology Telephone Time Service. IBM PC or clone and modem required. File NBSCOM.ARC (57,728 bytes) in Library 6, "Software & Pictures."

HEALTH & FITNESS FORUM

(GO HOM-54)

Healthy Food—A program for IBM PCs and compatibles that finds combinations of foods for a meal. It displays calories, fiber, polyunsaturated and saturated fat, cholesterol, protein and more. Shareware. Monochrome or color. File FOODSM.ZIP 99,092 bytes) in Library 10, "Nutrition."

HYPertext FORUM

(GO MACHYPER)

Where in the World?—HyperSunTimes, a stack that allows you to point on the world map to obtain longitude and latitude. Point and click to change inputs. HyperSunTimes will calculate sunrise and sunset times as well as the azimuth, altitude and declination angles. Requires HyperCard version 1.2 or higher. File SUNHOU (31,616 bytes) in Library 6, "Reference Stacks."

PC MAGNET UTILFORUM/TIPS FORUM

(GO PCM:UTILFORUM)

PC Magazine Program Index—A log file for Programming, Programming/Utilities and Utilities articles published

in *PC Magazine* from 1984 through Jan. 16, 1990. Indexed by program name, author, author title, purpose, and volume and issue number (though not all entries are indexed with all of these headings). This file contains pure ASCII text. Load it into your word processor and do string searches for areas of interest. File UTILOG.ARC (15,754 bytes) in Library 9, "Utility Programs."

IBM APPLICATIONS FORUM

(GO IBMAPP)

Sign Language Tutorial—A tutorial for American Sign Language. BASICA/GWBASIC and CGA minimum required. It teaches ASL by graphically showing the signs used. Shareware. File SIGN30.ZIP (77,824 bytes) in Library 11, "Education [A]."



IBM HARDWARE FORUM

(GO IBMHW)

System Info—TechStaff System Information (TSI) tells everything about a system. Much information displayed on 286/386 systems. From the TechStaff Tools Collection. File TSI12.ZIP (39,872 bytes) in Library 4, "Gen. Hardware [H]."

LDC SPREADSHEETS FORUM

(GO LOTUSA)

Using Sideways with Lotus—Instructions for using Sideways with Lotus 1-2-3 releases 2.2 and 3. Explains how to install Sideways as a release 2.2 add-in and how to make print files from release 3 that Sideways for Text Files (any version) can read and print. File SW22.TXT (13,035 bytes) in Library 8, "Add-on Products."

MACINTOSH ENTERTAINMENT FORUM

(GO MACFUN)

Be A Creator—Build a world and the races to live there. Your people compete for mastery, vie with other gods. Cause an ice age. Sink a continent. Shareware. Includes text documentation. File GODGAM.PIT (46,208 bytes) in Library 3, "Adventure Games."

RELIGION FORUM

(GO RELIGION)

Church Office Aid—CODA (Church Office Data Automation), a program for IBM PCs and compatibles that provides the novice or expert computer user with an easy-to-use software package to automate membership, tithe/offering and visitation record keeping. File CODA.ARC (85,888 bytes) in Library 10, "Computers in Religion."

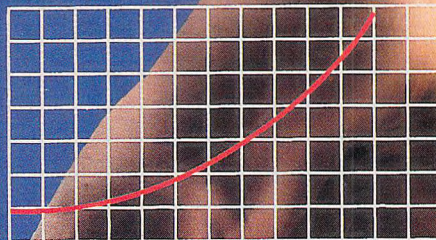
David Peyton co-authored *How to Get the Most Out of CompuServe*, now in its fourth edition. His CompuServe User ID number is 76703,244.

HAPPY

by Holly G. Miller

NEW

WELLNESS



PERFORMANCE LEVEL

MAKE PERSONAL WELLNESS YOUR FIRST NEW YEAR'S RESOLUTION

YOU

FEATURE

CM's Cover Story:

▼
A Healthy Dose
of Information

▼
Sports Doctors, p. 14

▼
Stress Solutions, p. 16

▼
Keeping Cancer
at Bay, p. 18

► **An American resolution: be healthy. But being informed is the first step in staying vital or fighting illness.**

If fitness is a fad, a lot of people have decided to sit it out. Only one in five adults exercises regularly enough for it to do much good. About a third of us are overweight to the point of diminishing our life expectancy. And most of us wait until our doctors issue ultimatums before we decide to shape up. Even when coping with serious illness, we often opt for a passive role and don't exercise our right to ask questions or actively participate in designing our own recovery plans.

Ignorance is no excuse. Pollster Louis Harris points to the huge gap that exists between what people *know* about health and what they *do* about it. We talk nutrition over our coffee and Danish; mimic commercials that show athletes trading beers, barbs and chicken wings at the neighborhood bar; and we resolve to take better care of ourselves ... beginning Jan. 1.

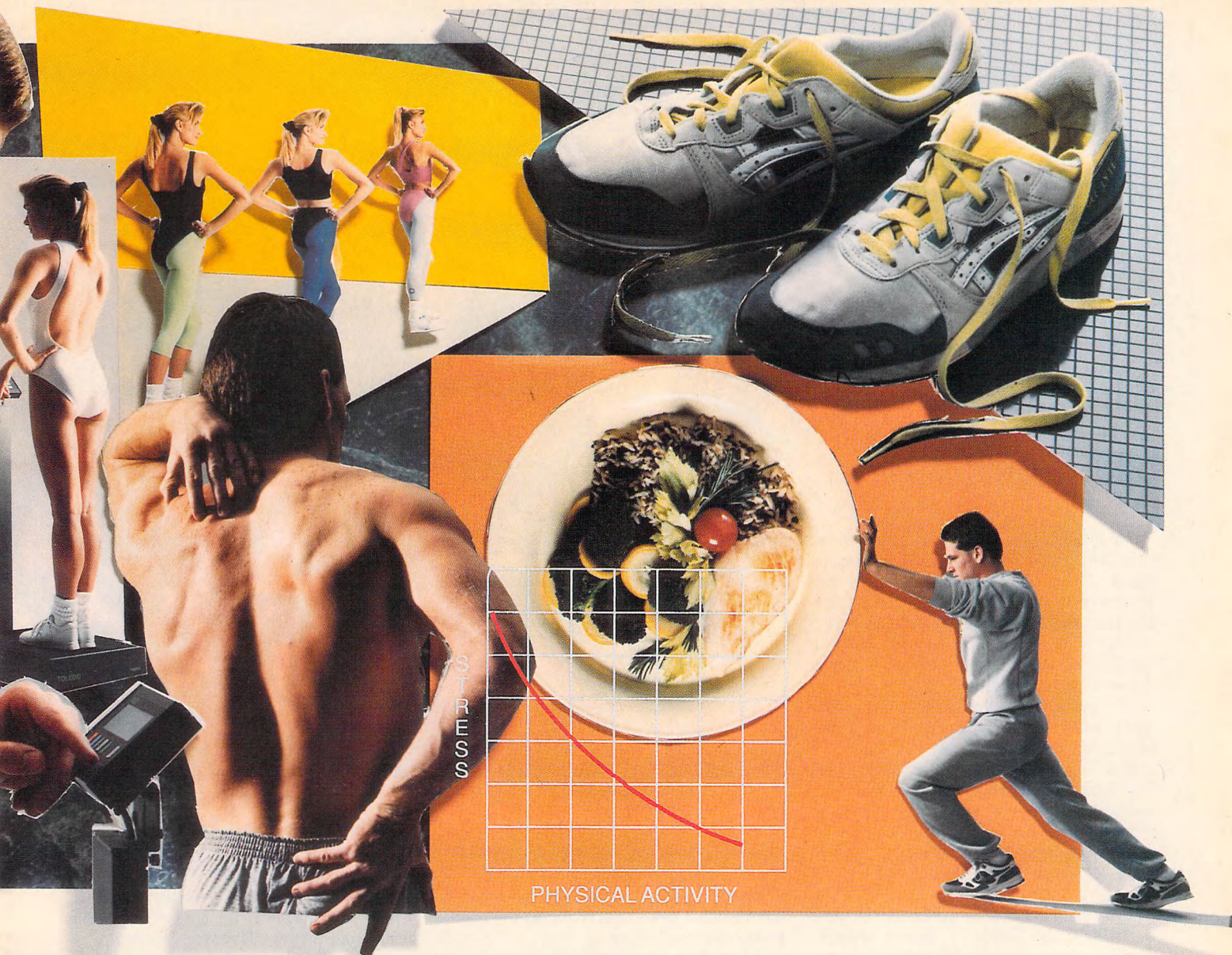
Well, happy New Year.

No Quick Fix

The time has never been more fitting for change, according to Allan Stevens, manager of the Health and Fitness Forum (GO GOODHEALTH) and owner of the Dayton-based consulting service Fitness Resources Inc. Offline incentives and online resources can help boost fitness, achieve wellness and better manage illness, says Stevens. But we've got to want to do it.

"Wellness is an individual's choice," he says. "Old habits die hard, and until people are willing to change voluntarily, nothing is going to help them."

The tendency has been to look for the quick fix. Rather than fretting over balanced menus, we pop vitamins. Instead of exercising to reduce tension, we reach for relief in a capsule. Typically, Americans buy about \$15 billion worth of over-the-counter remedies and nearly \$26 billion worth of prescription medicines each year. Such statistics earn us the label as an "over-medicated society," in the opinion of Dr. Arthur Barsky, psychiatry professor at Harvard Medical School and author of *Worried Sick: Our Troubled Quest for Wellness*.



"Persons who experience high-level wellness operate at their peak potential," says Stevens, who links good health with a disciplined lifestyle. Even people who must live within the constraints imposed by illness can achieve maximum wellness within those limits. "They follow a way of life that helps them actualize their potential, whatever that level might be."

Stevens argues that fitness is much more than fun and games, and that wellness encompasses physical, mental, social and spiritual health. He doesn't promise a longer life, just a happier one. And he insists that "life" doesn't begin at the end of the workday, but at the start. Fitness doesn't kick in when an employee clocks out.

"Employee fitness has been shown to boost productivity during the workday, while helping the employee conserve energy for the demands of personal life after work," he says. Statistics support this position. A questionnaire given to workers involved in on-the-job fitness programs confirmed that since joining the programs half of the employees felt a more positive attitude toward their jobs; a third of them felt they were getting along

better with family members at home; and an overwhelming 92 percent claimed they could handle stress more effectively.

"An active person in his or her 50s can lead as robust a lifestyle as a sedentary 30-year-old," says Stevens. "Most older active people report having few problems associated with their annual physicals. Blood pressure, cholesterol and stress have been improved, reduced or maintained as a result of active participation in personal and company wellness programs."

Unfortunately, it sometimes takes a near catastrophe to convince adults to get with the program. Participation in physical education peaks at 97 percent in elementary school and then begins its downhill slide. Activity drops off dramatically after high school graduation, with only 20 percent of adults taking part twice a week in one of the seven fitness-oriented activities—aerobic exercising, calisthenics, cycling, exercise-walking, exercising with equipment, running/jogging and swimming.

Stevens and other wellness proponents hope that these numbers will swell as opportunities expand and as the benefits of fitness

are touted. A major boost for fitness occurred when corporations became believers. With some organizations documenting as much as a \$6 return on every \$1 invested in employee health promotion, companies are seeing fitness not as a perk but as a plan to contain costs. And they're spreading the word.

"Some programs are started by employees getting together, pushing back the chairs in the cafeteria and bringing in an aerobics instructor three days a week," says Jim Clayton, executive director of the Association for Fitness in Business, a 3,000-member organization in Indianapolis. "Or, they can go with the 'cadillac version'—the fully equipped fitness center, the wellness classes, cardiac rehab, family counseling and substance abuse programs."

Keeping Wholesome Company

The configuration varies, but the concept is catching on. About half of companies that employ more than 50 workers now offer some kind of wellness promotion. "Survival of the fittest" is being taken literally by organizations left reeling from out-of-control health insurance premiums. Whatever the motiva-

No 'magic bullets': Lewis

What's Up, Sports Doc?

In the brave new world of sports medicine, Joe Namath's knees hold a place of honor. Their injury made headlines, but what's more important, so did their treatment. In recent years, the techniques of this branch of medicine have trickled down to benefit even that unheralded giant of sports, the recreational athlete.

An example of some less-famous gimpy limbs belong to Alex Pissalidis, a recreational runner from Queens, N.Y. Pissalidis shared his tale in the Health and Fitness Forum (GO GOODHEALTH). "I was running and pulled my knee muscle—actually, it was a rather gruesome popping sound. Now that I am seriously back into running, I want to know about any strengthening exercises I can do."

Was there a doctor in the house? Dr. Joel D. Wilk of the Dallas-Ft. Worth area responded. As a surgeon, Wilk was familiar with injuries like Pissalidis'. He counseled Pissalidis to have his knee examined before he resumed regular running and explained some of the treatment options available, such as MRI or arthroscopy.

MRI (magnetic resonance imaging) is a high-tech X-ray tool in which radio waves combine with a magnetic field to produce computer images of internal structures, such as the inside of a knee. With arthroscopy, a tiny camera is placed in the joint to help doctors detect and repair torn ligaments and tendons. Arthroscopic techniques have been used for many years, but with the growth of sports medicine, they are now commonly used to treat injuries of recreational athletes.

There are two types of injuries frequently seen by sports doctors, according to Dr. Charles Lewis III, director of the Central California Sports Medicine Institute. The first is the acute traumatic injury in which the symptoms develop soon after the injury. Criteria for seeking professional medical care in these cases include immediate pain and swelling; inability to use or move the body part; if the athlete hears or feels a crack, pop or tear; and pain that persists. "In

all cases, first aid should be immediately administered prior to arriving at the appropriate medical facility."

More often, says Lewis, sports doctors see "overuse injuries" caused by "repetitive microtrauma to the involved area. These syndromes usually develop slowly, and by the time the athlete realizes there is a problem, it can't be related to a specific causal event," he says. With this type of injury, it is more difficult to tell if you need professional treatment, but some guidelines include persistent pain with reduced exercise, pain beyond 10 to 14 days, and pain that resolves with rest but resumes with exercise.

Many of the sprains and strains recreational athletes take to the doctor can be attributed to "inadequate preparation for the desired performance level," says Lewis. In other words, overdoing it because of impatience to reach a goal or a limited understanding of the body's needs.

"Non-professional athletes, particularly children and teen-agers, should not be 'bullied' into playing sports while injured. This is how permanent injuries occur," he says.

For years athletes have searched for some supplement to help give them a competitive edge. All have been found wanting and some, such as steroids, have proven downright dangerous. The latest such fads are the chemical

compounds dihydro xyacetone and pyruvate, which some believe can help athletes run faster and farther. However, "there are no 'magic bullets' as such," Lewis contends. "Still, an athlete can fine-tune his performance by learning the nutritional potentials of foods and by sensibly manipulating the diet."

So you have eaten wisely and trained judiciously, yet your elbow (or your foot or your back) still aches. Who should you call? Probably not a sports doctor unless you have had previous experience with one. Lewis advises first visiting your family doctor and, if need be, seeking a referral.

Despite the large number of practitioners who call themselves sports doctors, there are still no universal standards governing their qualifications and practice. This is about to change. Lewis is working with a group of about 250 doctors who, once they have completed a three-year post-graduate course, will be the first Professional Team Physicians certified by the American College of Sports Medicine. "We are presently laying the groundwork and setting the standards by which all future sports medicine physicians will be required to abide," says Lewis.

—Philip Bishop

Get Well Soon

If your New Year's resolutions include launching a personal fitness program, advice contained in Library 7, "Exercise & Fitness," of the Health and Fitness Forum can help. Forum Manager Allan Stevens recommends the following files:

Personal Fitness	
Topic	File Name
Adult fitness	ADULT.EXE
Proper heart rate during aerobic exercise	EXERC1.THR
Creeping obesity	FAT.TXT
Simple exercise for optimal fitness	STAIRS.TXT
Stretching primer	FLEXI.TXT

For users interested in spearheading a wellness-in-the-workplace movement, Stevens suggests three files in Library 15, "Healthy Workplace." Check out:

Wellness in the Workplace	
Topic	File Name
Stress in the workplace	STRESS.TXT
Smoking cessation on the job	SMKCES.TXT
Corporate health promotion	HLTPRO.TXT

For a complete list of health and fitness associations, see the files posted by interest with .LST as an extension (FAMILY.LST, FIT.LST, etc.) in Library 17. Also in the Self-Help and Support Library (Option 17) is a compilation of toll-free telephone numbers. Files are posted by topic or disease, such as HEART.800.

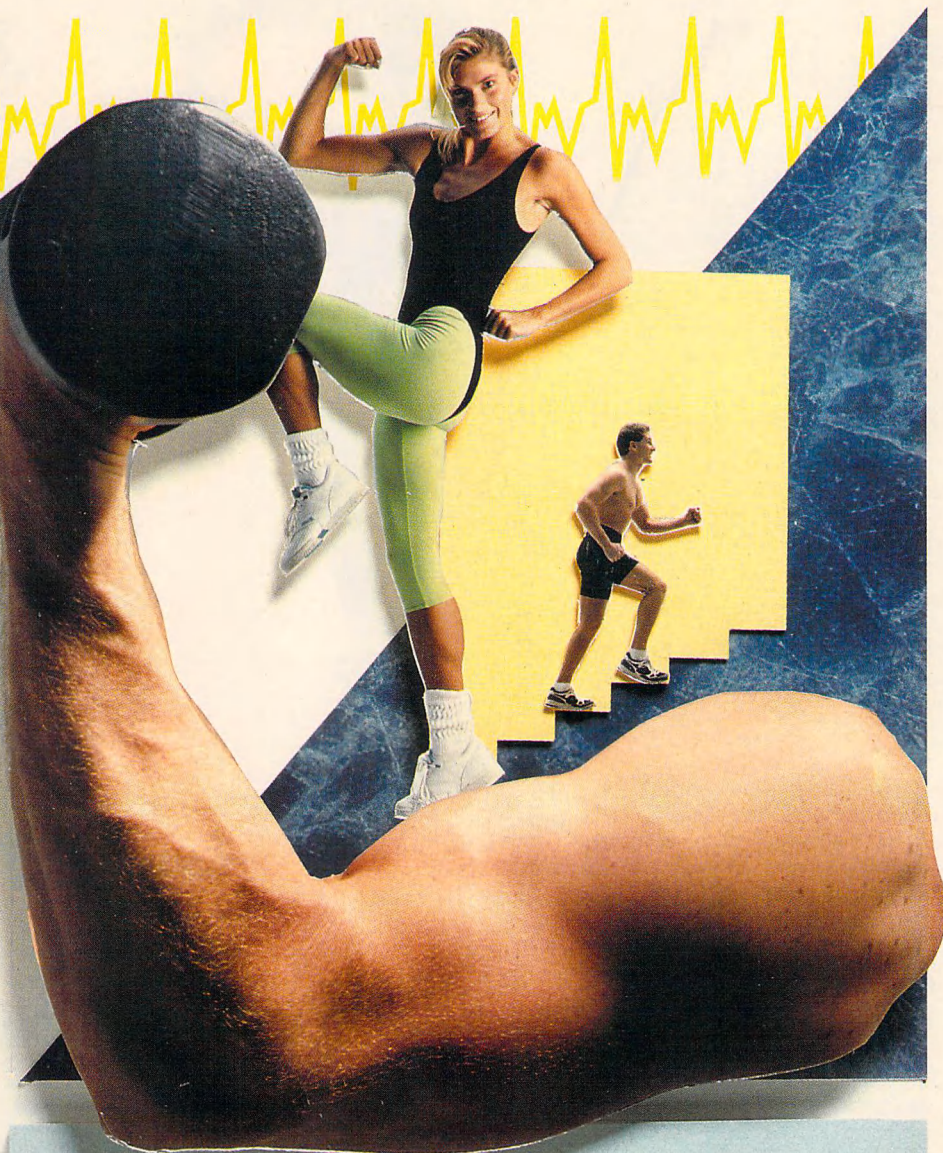
tion, fitness experts agree that working Americans are in better shape because of the on-the-job wellness efforts. If that's the good news, here's the bad: The corporate body is still far from fit.

"You might think that a factory worker who does a lot of lifting or a mail carrier who does a lot of walking would be in very good shape," says Clayton. "The truth is, our bodies become accustomed to whatever we do. Even if we have very physical routines we need some variations to achieve a good balance."

The hope is that employees who spend 40 hours a week in an environment that emphasizes wellness will carry some of the fitness philosophy home.

"If companies can help individuals improve their wellness potential, then individuals can improve their families, and families can improve communities. That's what it's all about," says Stevens.

Stevens envisions CompuServe's Health and Fitness Forum as a resource to all levels of the wellness hierarchy—individuals, families, businesses and communities. Once a person has made a commitment to wellness, he or she can find online information and support for every aspect of a self-designed program. Library topics run the gamut from



Anyone Game? R.I.C.E. to the Rescue

A good rule of thumb for the immediate treatment of an acute injury to an extremity is R.I.C.E.:

R = Rest the involved extremity; move it as little as possible.

I = Ice applied immediately to the traumatized part to keep down swelling and facilitate healing.

C = Compression applied by using a wrap, such as an Ace bandage, which greatly minimizes swelling.

E = Elevation of the injured extremity, which also reduces swelling.

A note of warning when you ice, compress or elevate: Make sure there is good color in the tissue distal to the injury. If the skin doesn't turn whitish and then return quickly to the normal color after putting pressure on it, there is a possible interruption to the circulation of the involved extremity. This is considered an emergency; the individual should be immediately taken to the nearest emergency facility.

nutrition to the environment to substance abuse to mental health.

When Illness Strikes

A proactive stance is endorsed not only as a way to prevent health problems, but also as a way to manage health problems if and

when they occur. The slate of forum sysops includes a psychiatrist, family practitioner, vascular surgeon, psychotherapist and an internist. Swapping information is common, and referrals to various databases and forums on the General Health menu (GO HEALTH) are frequent. The online medical

Tense? Me, Tense?

Prediction: This year—if it's anything like last—more than 65 percent of all visits to family doctors will be for stress-related problems. What are some quick techniques for relieving pressure on and off the job? Allan Stevens, manager of the Health and Fitness Forum, suggests four easy stressbusters that can reduce tension and boost energy.

Lighten up.

Try to make your stressful situation as absurd as possible by exaggerating the predicament. Usually, it's how you perceive a situation rather than the situation itself that causes the tension.

Laughter is unbelievable medicine. Physiologically, it is a quick 15-second aerobic workout. It helps the muscles between the ribs to expand and contract the chest rapidly, assisting the lungs and heart to supply a quick burst of oxygen to the brain while stimulating the rest of the body by increasing the blood flow. The neck and shoulder muscles release stored-up tension, blood pressure is reduced and the heart rate decreases. After a good laugh, the body is left in a relaxed state.

Check out.

Give yourself a break. Get away from the crowd and relax in a comfortable chair or on a couch for a few minutes. Close your eyes and practice simple relaxation techniques. Begin by inhaling deeper breaths. Stress causes you to breathe in rapid, shallow motions that deplete the oxygen. Breathing slowly and deeply allows your lungs to take in more oxygen, and that helps to relieve tension.

Slowly inhale through your nose, hold for a few seconds, then exhale through your

mouth. Practice controlling your exhale rate. Repeat the process three or four times while clearing your mind of negative stressors. Focus on ridding yourself of a distraction with every exhalation. Concentrate on a thought that gives you contentment or satisfaction. After five to 10 minutes, stretch, take one last deep breath, open your eyes and re-enter the real world. You should feel ready to manage the next challenge.

Take a hike.

Henry David Thoreau claimed the depth of his thoughts matched the length of his stride when he took walks. Even if Walden Pond isn't part of your work compound, a brisk walk with arms swinging, head erect, and eyes focused ahead and not down will help reduce your tension and increase your oxygen consumption. Again, deep breathing and the body's response to increased activity help combat the sensations of internalized stress.

Count to five.

To relieve the anxiety of continual technostress experienced at computer workstations, try the 15-second "up-against-the-wall press and mental-lucidity pause."

Stand with your back to the wall and with your heels eight to 10 inches from the baseboard. The back of your head should rest gently against the wall, both shoulder blades and the upper portion of your buttocks pressed flat to the surface, with arms resting at your sides. Close your eyes while deeply inhaling through the nose. Hold your breaths for a 3- to 5-second count. Exhale while trying to press your spinal column against the wall—starting at the shoulders and working down toward the buttocks. You should finish exhaling and stretching your spinal column after a 10 to 12 count.

As you step away, your posture will be improved, with shoulders back, tension relieved and mind refreshed.

—HGM



Sports Med Resources

On CompuServe you can find information about sports medicine in three places: HealthNet (GO HNT), the AAMSI Medical Forum (GO MEDSIG), and the Health and Fitness Forum (GO GOODHEALTH).

- ▶ Option 2 on the HealthNet main menu is a sports medicine database, which offers information on exercise and nutrition and some specific sports. Much of the information is designed to help prevent injury by providing an appreciation of what goes on in the body during exercise or recreational sports. You also can learn about injuries common in running, swimming, tennis, racquetball, aerobic dance and scuba diving (and how to avoid them).
- ▶ In the Health and Fitness Forum, recreational athletes and health-care professionals share opinions and information. Four files in Library 7—EXERC1.THR, STAIRS.TXT, PHYFIT.TXT, ADULT.EXE—contain advice about exercise. Forum member Dr. Jim Culveyhouse provides the chiropractor's point of view of sports medicine.
- ▶ The AAMSI Medical Forum offers advice from doctors, nurses, psychologists and others. It is a good place to visit if you want technical information, for example, about MRI and which hospitals offer this treatment.

community stretches from a focus on fitness to a game plan for dealing with disease.

Self-help resources can be found in several areas of various forums and databases. They are particularly useful to persons trying to manage a long-term illness or struggling to accept an unwelcomed diagnosis. Often they answer the questions, 'What should I do next?' or 'Where do I go for help?' Whether the problem concerns the three most feared diseases in the United States—AIDS, cancer and Alzheimer's—or a simple bout with allergies or the flu, the symptoms are described, treatments are discussed and support is offered. Above all, facts are provided in clinical and non-clinical terms, from the points of view of the medical profession and the patient. And the information is regularly updated.

For instance, new to Library 17 of the Health and Fitness Forum is a listing of toll-free telephone numbers to answer questions regarding specific health-related problems (files are posted by topic with an .800 extension). Also in Library 17 is a list of physician specialties with guidelines on choosing the right one (DOCTOR.DEF). Library 8 of the Issues Forum (GO ISSUES) contains lists of self-help clearinghouses (CLEAR.TXT) and toll-free helplines (PHONE.TXT) in the United States.

Users who want to be put in touch with

persons who share a particular health concern can contact Ed Madara, author of the *Self-Help Sourcebook* and overseer of the American Self-Help Clearinghouse, by leaving a message in Section 8 of the Issues Forum. Madara will respond with the names of self-help groups already in operation or explain how new groups can be launched.

"Historically, self-help networks have served as the seeds of needed new health societies and movements," says Madara. "Personal computer telecommunications can accelerate the 'health progress' cycle by helping more individuals with special problems to meet others with the same problems, to recognize that they are not alone, to pool information, and to organize more quickly and easily."

Additional information can be gleaned from Information USA/Health (GO IUS), which provides the telephone numbers and addresses of government agencies dealing with specific health problems. For instance, a person interested in researching AIDS can enter the Health Clearinghouse and locate the telephone number and address of the Center for Disease Control dealing with AIDS. Also listed are two hotline numbers, a crisis helpline and resources for free printed material about the disease and its treatment. (For a health concern as serious as AIDS, information is available in a variety of

databases and forums. For a complete list, type GO AIDS at any prompt.)

Such a wealth of data is helpful to a person trying to understand and manage an illness, and also to friends, family and co-workers who indirectly must cope with the problem. How should they react? What symptoms should they expect? A note posted on a forum message board touches off a variety of answers.

"The Health and Fitness Forum has been particularly valuable in helping me to understand an employee who has Chronic Fatigue Syndrome," notes one supervisor. "The printed materials are rapidly out of date on this 'real time' problem."

For the person researching a little-understood condition such as Chronic Fatigue Syndrome, the National Organization for Rare Disorders database (GO NORD) offers information and direction. The organization was founded in 1980 and is dedicated to the identification, control and cure of rare "orphan" diseases. NORD labels an orphan disease as one that affects fewer than 200,000 Americans. The database currently includes information on more than 5,000 afflictions within that designation. Chronic Fatigue Syndrome is one, although as many as 2 million people (mostly women) may suffer from it. By following NORD menus, users can work through the symptoms, causes, standard therapy and investigative therapy for Chronic Fatigue. In addition, addresses are provided for two Chronic Fatigue Syndrome associations, one in Kansas City, Mo., and a second in Portland, Ore.

Getting Emotional Support

An added dimension of help, information and support comes into play in the two online forums devoted to specific diseases—the Diabetes and Hypoglycemia Forum (GO DIABETES) and the Cancer Forum (GO CANCER). Contrary to what a first-time visitor might expect, the atmosphere within

More Than One Way to Slay Cancer Dragon

At some point during her five-month stay in the hospital, retired Michigan attorney Barbara Stone decided she was ready for company. She called the local Radio Shack and had a laptop delivered to her room. Two years later, the stream of visitors hasn't stopped, and neither has the deluge of information. The mix of online friends and database facts has helped her and her doctor map her strategy to fight the "dragon"—Cancer Forum members' name for the disease they battle. Currently, she's holding the enemy at bay.

"Being a cancer patient—even one with seven children, a husband, two dogs and a variety of friends—can be one of the loneliest things in the world," says Stone. "There's a period after diagnosis when you really don't know if there is a tomorrow and, if there is, what shape you're going to be in. Even after you get through that stage and think you have your act together, you get a hangnail and the first thing that crosses your mind is, *oops*, it's the cancer again. You're convinced whenever anything twinges, hurts or goes wrong that the dragon is back. Only someone who has gone through it really understands how scary it is."

Stone decided shortly after her diagnosis that her most effective weapon against the dragon would be information. She recalls the first time she met her oncologist. "He told me as much as he thought I could understand." By the next visit he found her studying a borrowed medical book. Then she began tapping into online libraries via her newly arrived laptop and providing him with printouts of what she found. He liked her determination *and* her printouts.

"The more you know, the better equipped you are to make informed decisions," agrees Betty Julian, a psychologist, member of the Cancer Forum, and a keyboard-to-keyboard pal of Stone. "Information gives you choices you might otherwise not have, out of ignorance. It's not good to be too complacent about cancer. Research indicates that 'difficult' patients live longer, whereas the 'good' patients, as judged by a medical staff, die sooner. By insisting on an active role in your treatment, you may rock the medical system's boat a bit, but that's likely to be to your benefit in terms of longevity."

Stone's doctor welcomed her participation. When tests indicated that her liver had suffered serious damage, Stone turned to Health Database Plus (GO HDB) for an explanation. "I typed in two reference words that the doctor had used—'fatty liver'—and instantly had a list of about 60 articles that contained the key words," she says. When it was determined that she would benefit from

Online databases and 'a big family' in the Cancer Forum became her best defense: Stone

a low-fat diet, she checked into the Health and Fitness Forum for direction. "I found a program that gives the fat content of all foods; so I loaded it for future reference."

The Cancer Forum (GO CANFORUM), Stone says, was extremely helpful as well.

"This is a time when you're feeling bad, looking worse, and you don't dare go by the mirror," she says. "Then you pick up a computer and all of a sudden you have 40 people talking to you, cheering you on, helping you by discussing not only the cancer but the latest TV show or movie, *anything*. They can't see your skin turning colors or your hair falling out in heaps. The loneliness disappears and the panic goes away."

And the friendship continues non-stop, even during the quiet hours. "The 24-hour aspect of the forum is a real blessing," says Julian. "Some nights when I can't sleep, I can read and answer messages, and have a sense of expressing what I'm feeling, even if no one is listening just then. Likewise, when I'm sick and home by myself, I can sign onto the forum and not feel quite so alone."

The forum also has a side door that allows for communication other than via modem. Phone calls are placed, cards are exchanged and members gather annually in Kansas City for reunions. The outpouring of friendship through electronic and traditional mail has set mailroom records in more than one medical center where forum members have been hospitalized. The parents of a young cancer victim tallied nearly 4,500 messages over two years. Members are particularly tuned into each other's treatment schedules and know when a test result is due or a round of chemotherapy is slated.

"My son Joshua used to think of the forum as a 'gloom and doom' gabfest," says Stone. "I made him sit down and read through a set of messages one day, and he quickly redefined his thinking. Now my children are amazed by it. The forum is like family, and anyone who shows up had better be ready for a *big* family."

—HGM



JUNEBUG CLARK

both areas is anything but gloomy. Members are determined to achieve the highest level of wellness that they can, within the limitations of their disease. They are convinced that information empowers them. So does the "we're all in this together" camaraderie of the electronic support groups.

Success has been phenomenal. Launched in a private corner of the Atari Productivity Forum, the diabetes group was operating a capacity message board within a month. It moved into a separate section of the Health and Fitness Forum, continued to grow, and was given full forum status less than a year ago. Membership now exceeds 1,000. The forum provides services often not available elsewhere.

"There aren't diabetes recovery groups as such," says Forum Manager Dave Groves, whose own diabetes was diagnosed when he was nine years old. "Generally speaking, groups are run by hospitals, and they amount to fairly stern lectures on how 'you gotta do this or you gotta do that,' but we're not told what it really means to be a diabetic. The forum attracts case-hardened old scoundrels like myself, who have been on and off

the diabetes program for many years, and newly diagnosed diabetics who aren't sure yet what the program is."

For all newcomers to the forum, the welcome is warm and informative. Statistics are offered as assurance that many people share the problem and that much help is available. (According to Groves, about 6 million Americans have been diagnosed as diabetic, and another 6 million have the disease but don't know it.) The recommended treatment program, which involves diet, exercise, medication and stress management, is discussed in detail. Members acknowledge that compliance with the program is essential, difficult and sometimes impossible.

"Total compliance means doing exactly what your doctor tells you to do," explains Groves. "The problem is that we can't always be certain that we're going to eat a 437-calorie lunch promptly at noon each day. It's not humanly possible. In order to get with the program and stay with it, the diabetic needs the contact of other diabetics who are struggling with the same problems. The forum has done a great deal of good in bringing together people who share similar pains and

concerns."

Because forum members can swap their positive and negative experiences, they eliminate much of the self-doubt and guilt that can result from less-than-perfect blood sugar control. According to Sysop Michael Mohlé, "The magic of this forum is that it allows a frank discussion of the problems we face. The electronic aspect removes a lot of the ego problems that would occur in a typical support group."

The exchange of information is particularly valuable to the "new" diabetic who is still reeling from his diagnosis. "Without the forum, I'd still be trying to figure out how I got diabetes," says forum member Phillip Kulpshas. "I'm getting help in controlling and living with diabetes that is putting me light years ahead of where I'd be without the forum."

As successful as the forum already is, its manager has expansion on his mind. "If I could ever unite the 12 million diabetics in the United States, we'd have a voting bloc that could really get some good things done," says Groves. "My fondest dream for the forum is, as I say on my letterhead, to 'Edu-

Eliminating doubt: Sysop Groves, wife Sara

Diabetes Forum Favorite Files

Of the more than 250 files stored in the Diabetes Forum libraries, the most frequently downloaded is Library 2's HYPOFA.TXT, which describes first aid for insulin-taking diabetics. Other useful files, as recommended by Forum Manager Dave Groves, include:

Library 2, "Beginners' Topics"

- ▶ An introductory series on how diabetes works—DIAB01.TXT, DIAB02.TXT, DIAB03.TXT, DIAB05.TXT

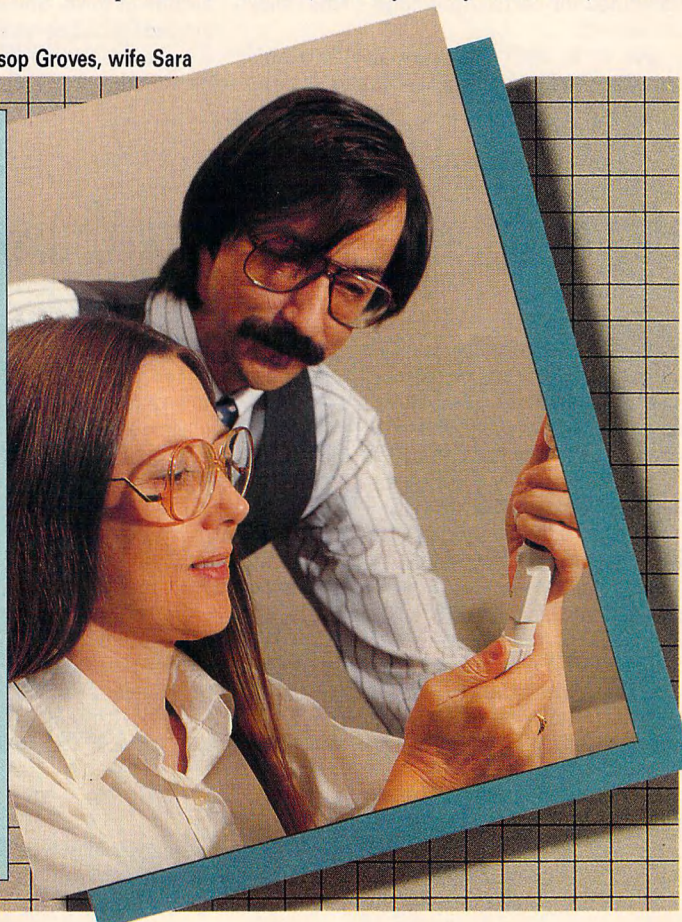
Library 7, "Diet and Exercise"

- ▶ An American Diabetes Association diet exchange calculator for Macintosh computers—EXCALC.SIT
- ▶ An MS-DOS program for calculating calories and food exchanges—MEAL.ARC

Library 11, "Technical and Theoretical"

- ▶ Highlights of the latest news in diabetes literature—DMH001.TXT, DMH013.TXT
- ▶ Simple formulas for determining ideal weight and the ideal calorie count needed for a given weight—IDEALW.TXT and IDEALC.TXT

For Type II diabetics, files LOWFAT.TXT and MISCON.TXT relate how to reduce fat in the diet and explain common misconceptions about diabetes diets. Both are located in Library 7.



DAVE GROVES

cate, Motivate and Activate.' I want to educate my fellow diabetics and the community at large as to what diabetes is and what they can do to help."

Beating the 'Big C'

This emphasis on information-sharing, so prevalent in the Diabetes Forum, also is obvious in the Cancer Forum.

"We're proactive," says Forum Manager John Ross. "Most people who come up against a disease like cancer or diabetes feel the immediate need for information just to handle the diagnosis. Knowledge is a definite factor in the survival rate of cancer, and it's something we promote heavily in the forum. We've seen people come online and find out about treatment alternatives. We've encouraged a lot of patients to get second and third opinions, and that can influence the treatment course."

With an international membership roster of more than 3,000 persons, the forum may be the world's largest support group. In addition to fact-packed medical files, the libraries offer everything from easy-to-digest recipes (chemotherapy patients sometimes suffer damage to their gastrointestinal systems) to games geared to amuse hospital-bound patients. A series of graphics shows persons scheduled for certain procedures what they can expect.

As it is with so many health-related online services, an important function of the

Dragon-Slaying Tools

Coming to terms with cancer begins in Library 4, "Resources," of the Cancer Forum, where a glossary offers easy-to-understand definitions of such medical jargon as "antigen," "DNA" and "informed consent form" (GLOSSA.TXT). Also located in Library 4 are suggested resources to tap for additional information about the disease:

- ▶ A list of medically oriented bulletin board services across the country—MEDBBS.JUN
- ▶ The names, addresses and telephone numbers of 25 health-care facilities in the United States designated by the National Cancer Institute as "comprehensive cancer centers"—CENTER.TXT
- ▶ A compilation of cancer-related booklets available free from the National Cancer Institute by mail or telephone (1-800/CANCER)—INFO.TXT

Stored in Library 8, "Research Library," are several literature searches conducted by forum member and registered nurse Sylvia Steiger. Filed by topic, these references direct users to dozens of articles about new cancer-related products, procedures and research. Short summaries of the articles are included to save users time.

One of the most popular forum files is located in Library 5, "Motivation," and contains 25 practical tips on how to help cancer patients cope with their illness (ILLHLP.TXT). Provided by forum member Alfreda Verratti and written from a cancer victim's point of view, it suggests specific acts of friendship such as "water my flowers," "tell me about support groups" and "include me in decision making."

Cancer Forum is referrals—telling patients and other interested parties where to turn for more help. Ironically, it was frustration with existing sources of referral information that led to the creation of the Cancer Forum in the first place.

"My mother's mother died of cancer," explains Ross. "I was discussing this with my parents a number of years ago, and I asked my mother if she had ever called the cancer hotline in town. She said that she had tried, but that it had always been busy. I said, 'Well it's a shame that the hotline wasn't on CompuServe.' The proverbial light bulb flashed on

and the forum is the result."

Like all of the overseers of health-related forums and databases, Ross stresses that online resources are not meant to substitute for medical care provided by practicing physicians. Instead, CompuServe resources enhance the doctor-patient relationship. "I want to have a one-stop place for any kind of cancer information that you'd ever want to find," he says. "You can *never* get enough information." ◀

Holly G. Miller, a free-lance writer and college professor from Anderson, Ind., is travel editor of The Saturday Evening Post. Her CompuServe User ID number is 70007,2345.

Health Databases: Educate Yourself

What's the difference between narcolepsy and Chronic Fatigue Syndrome? A migraine headache and temporal arteritis? Several online databases can be searched before you visit your doctor to help you frame more informed questions. After the appointment, you can do quick follow-up research to fill in the blanks on names your doctor dropped or treatment options mentioned.

Health Database Plus (GO HDB)

Recent additions bring the total number of articles in this database to more than 48,000, with more than 35,000 in full text on topics related to health, fitness and nutrition. Three kinds of publications are included: 79 health journals such as *Prevention* and *Psychology Today* offer full-text articles geared to the lay reader; 83 technical and professional publications such as *The New England Journal of Medicine* and *Patient Care* are available as non-technical summaries of the original article; and a variety of health-related articles, selected from a number of consumer publications, can be retrieved in full text.

HealthNet (GO HNT)

Designed for the health consumer doing preliminary research on a topic, HealthNet provides a home medical reference library and an area devoted to sports medicine. Browsers can pick up interesting

trails that often lead to tightly focused information. For instance, a user might begin to research a topic as general as "headaches" and be led to "migraines" and then to "ergotamine" under the drug section.

PaperChase (GO PCH)

PaperChase puts MEDLINE (the National Library of Medicine's database of references to the biomedical literature) at researchers' fingertips. A successful search doesn't require knowledge of medical terms or a set of search commands. The user merely types in what is natural and lets the program find the best search term. The database contains more than 6 million references from 4,000 journals. Each week more than 8,000 additional references are indexed and abstracted.

Physicians Data Query (GO PDQ)

Published by the National Cancer Institute, PDQ contains four separate databases. Perhaps most useful to the non-professional researcher is the Consumer Cancer Information File, which offers material covering more than 80 cancer types, written for the layperson. Information on treatment alternatives, stage expectations and general prognoses is provided. Also, the Directory File lists 1,500 institutions having National Cancer Institute-designated cancer centers and includes names of about 12,000 cancer specialists.

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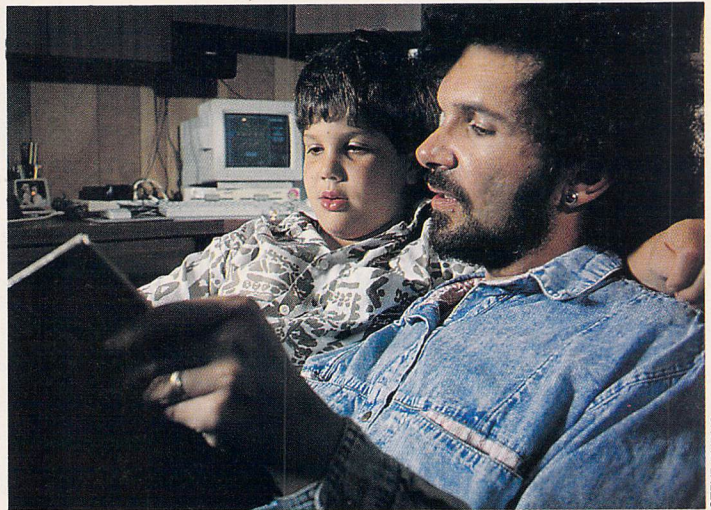
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STEVE BURNS

MAUG veteran drawn by passion for the hobby: Winograd, son Ian

A Decade of MAUG

► The venerable '24-hour manual of everything' celebrates 10 years of camaraderie and expert support.

At age 10, the Micronetworked Apple User Group (MAUG) on CompuServe is almost as old as the microcomputer industry itself. It has been a decade of volatile change for the computer communications industry, too. And for Apple enthusiasts, watching from the sidelines on CompuServe, MAUG has remained a consistent vantage point from which to observe the tumult.

Even MAUG members who have maintained a presence online for years recall starting out much the same way. "MAUG was much smaller when I first came online," says long-time MAUG member Lofty Becker. "Most of us were on at 300 baud. To some extent that meant there was a lot more 'live' interaction in CO [conference], because there was nothing approaching an automated telecom program, until MAUG member Dennis Brothers wrote a basic program with some patches added in assembly language."

Marty Silbern timer, who recently became an assistant sysop, recalls having a question about a piece of software and not knowing where to turn. "The first time I posted the question, an answer came about an hour later—from the guy who'd written the program. I was really impressed."

Robert Seaver describes this sort of typical, turbo MAUG support as "expertise that boggles the comprehension." He calls MAUG "the 24-hour manual of everything." If you don't find yourself talking with the author of a piece of software directly, he adds, you may have to settle for "a user of the software who knows more about what it can and cannot do than the author."

But all that brain power can be a bit frightening, according to Silbern timer. "Say you have a problem with your software and you go online and start to see the names of the people who are listed as software authors in your manual. That happened to me."

MAUG veteran David Winograd recalls a similar encounter with movers and shakers online, but says, "Once I met these folks, the names didn't freak me out anymore, because I realized they were just people like me."

On Comets

There tend to be two kinds of people on MAUG, Becker observes. "Some are like comets. They come on and are pretty active for a while and then disappear. They'll reappear in about six months for a brief period. Then there are those who seem to stick around."

And there's something to be said for the consistent quality among those who have stayed with MAUG from the days of the Apple II Plus to the IIfx. "It's a true users' group," Seaver says, "with no axe to grind."

Says Silbern timer, "One of the fun things to do back in 1984 when the Mac was introduced was to watch people slowly move over

Continued on page 24

COMPUTING SERVICES

CM's Computing Services Credo: For those who call out for advice, answers, even mere companionship in a discomfiting computer world, we throw you the online rope that connects to the main. No man is an island unto himself. Herein the Control-G tolls for thee.

▼
Polishing Off
Apple's Decade

▼
Toshiba's Forum, p. 25

▼
Symantec's List, p. 27

The Apple Family Tree

From a few Apple II users gathering in CompuServe's CB Simulator, MAUG® has grown dramatically, helping thousands of Macintosh and Apple II (and even Lisa and Apple III) owners. Here are some occasions of note from its 10-year history.

1980

MAUG is one of the first SIGs (special interest groups, the precursors of forums).

1981

MAUG adds software programs. Uploading and downloading have become commonplace, but in 1981 the forum libraries were new and exciting.

1983

Apple Computer co-founder **Steve Wozniak** appears in an online conference.

1984

The Macintosh is introduced. MAUG Sysop **Dennis Brothers** writes the first generally available terminal program, MacTEP, in BASIC, and gives it away so users can access CompuServe with Macs.

1985

MAUG splits into two forums, Apple II/III and Macus, as Macintosh owners generate tremendous growth in forum activity.

MAUG hosts a major multiple vendor, multiple network conference to create the MacBinary file-transfer format, which quickly becomes the standard for binary transfers of Macintosh files. (It is still in use in 1991).

Bob Perez writes VMCO (Visual/Voice MAUG Conferencing), and cries of "Show your face!" echo in MAUG for months. (The concept is later revived in the CompuServe Navigator.)

1986

The Apple Developers' Forum becomes MAUG's third forum.

The Macintosh Plus is announced in an online conference simultaneously with the product's introduction at the Macworld Expo.

Apple stockholders' meeting is reported live in an online conference.

John Sculley appears in a special online conference, part of an online weekend for users' group ambassadors jointly sponsored by Apple, CompuServe and MAUG.

1987

HyperCard is announced, and MAUG hosts an online conference with **Bill Atkinson**, **Dan Winkler** and **Danny Goodman**.

Mike O'Connor writes a small shareware program called Navigator that gives CompuServe a Macintosh interface.

The Apple Developers' Forum becomes the Mac Developers' Forum, a HyperCard forum is added (Apple Hyper); Macus splits into Mac Productivity, Mac Fun and Mac Business; and a vendor support forum, Apple Vendor, and an Apple user group forum are created, bringing MAUG forums to eight.

1988

The Apple II/III Forum splits into Apple Fun and Apple Productivity, and a second vendor forum is created. The Apple User Groups Forum and Mac Business Forum are reorganized into the other forums, bringing MAUG to nine forums.

MAUG member **Dan Henderson** loses his 12-year-old son, **Nathan Jeffrey**, to AIDS, and starts a message thread asking for more AIDS education and less discrimination against innocent children. The thread develops into a sharing of grief and love among many MAUG members.

1989

Sysop **David Ramsey** is fired by Apple Computer because of messages left in the MAUG forums. Long-time MAUG member and *MacUser* magazine senior editor **John Anderson** is killed in the San Francisco earthquake.

The big MAUG reorganization in November results in 11 forums: Mac Productivity, Mac Fun, Mac Hyper, Mac Design, Mac Developers', Mac New Users, Mac Communications, Apple Productivity, Apple Fun, Apple Vendor A, Apple Vendor B.

1990

The Macintosh version of CompuServe Information Manager is shipped giving Mac owners two Mac interfaces to CompuServe, CIM and Navigator.

In November, **John Sculley** returns to MAUG, not as a one-time conference guest, but as a month-long celebrity guest in the Mac Community Forum.

By the end of the year, MAUG has grown to 10 Macintosh forums and three Apple II and III forums, all from the one little forum that opened in 1980. What will the next 10 years bring?

—Robert Wiggins

Continued from page 22

to the Mac. Whenever you want to find out something about a new Apple machine, or a new system, MAUG is the place to be. Look at the people who are out on MAUG day in and day out," he adds, "Bill Steinberg, Steve Brecher, Charlie Jackson and other high-profile Mac people. That's the type of participation that makes MAUG so successful."

Silbernik considers MAUG the industry model for how to make telecommunications meaningful. "For 10 years, Neil [Shapiro, MAUG chief sysop] has managed consistently to promote civility without censorship and deliver focus without alienation. It's an incredible feat," he says.

MAUG veteran Anne Peck has "met the most amazing group of people online. I expected it to be people knowledgeable about the use of the computer. But they're also law professors and heart surgeons."

In the MAUG forums, Peck observes, "people may be serious when they start off answering a question, but they're apt to go off on tangents—different kinds of foods, different kinds of cars. You discover that people have so much depth. And that com-

puters are just a part of their lives."

Seaver compares Neil Shapiro's role as chief sysop to that of the mayor of a small city. If that's true, it's more of a neighborhood than a municipality. The sense of community engendered by the idea of Neil as "mayor" is echoed among those who call MAUG home.

Winograd has been online in MAUG for about four years. For three years before that, he managed a bulletin board service for Apple II Plus and IIe users in New York City, until he "got bored with the quality of thought and hungry for something more." He found that something in MAUG.

"One thing neat about MAUG," Winograd says, "is that people have to make a commitment. They don't do it haphazardly. The people who 'stick' are there because they want to be there."

"There aren't many people who have the same degree of passion that I have for this hobby," he admits. "And when you find them it's really neat. They all meet in the same place and are there for the same reason." He compares his MAUG confidants to the characters in the movie *Field of Dreams* "who were just drawn to that field. They had to go."

Added Dimensions

Veteran MAUG members all admit that automated communications software has changed online dynamics considerably. For one, "offline processors take the work out of it, which really helps the communities begin to click," says Winograd.

"We're all suffering from information overload," says Becker, "and automated programs make it much easier to go online each day. I think it would be impossible for me to keep up with all the different forums without some sort of automated program. I set it to run at 5 a.m., get up, have a cup of coffee and see what's happened the night before."

On the downside, "there have been fewer conferences since the advent of Navigator," says Becker. "You can see that there are 20 people or so online, but chances are that half or more of them are on some sort of scripting program. People are not meeting each other as much. I wish there were some way to revive the occasional conference."

The addition of "face" icons to the Navigator communications stream is an equally interesting development for MAUG veterans. It's a story that has its roots in VMCO, a conferencing utility that enjoyed its heyday

around 1986.

VMCO employed user-created face icons to bring a bit of personality to the traditionally text-only conversations online. Navigator author Michael O'Connor included face icons as part of the software, so messages could include a postage stamp-size image of the sender and receiver of mail. Those icons now come in 8-bit color and can be animated in an 8-frame storyboard.

"In some instances, faces almost make it a different world," says Becker, "because one of the fascinating things before the icons was the extent to which they did or did not correlate with your image of a person when you would eventually meet them in the flesh. Now, a lot of the faces are more or less good representations. Some are even scanned from photographs. So you could walk down the street and pick the guy out of a crowd."

Around the World

Best of all, MAUG isn't just a local phenomenon. "I remember posting a message that my wife and I were planning a trip to Hong Kong and Thailand," recalls Becker, "and getting a host of advice from people all over, including a guy who lives in Hong Kong and a Northwest Orient pilot who regularly visits that part of the world."

"Before we went to Hawaii," Becker continues, "a number of people gave us an enormous amount of information on restaurants, places to go and things to see. We even received a private phone number from someone whose father was a big politico, in case we got into any trouble. My rule at this point is never go anywhere without first asking for information on MAUG."

Winograd had a similar experience after posting a message asking MAUG members to send his son, Ian, a card for his eighth birthday. "By the time I printed it out, there were 18 pages worth of birthday messages from all over— including Holland, Sweden and Israel. Ian took them to school, and his class and his teacher flipped out."

Like father, like son, Winograd reports that Ian is "hooked" on online computing. "Thus far I've been lucky enough to side-step the whole issue of buying Ian his own modem. When that happens, we're in big trouble."

Michael Mooney is a free-lance writer and Macintosh enthusiast based in Boston. His CompuServe User ID number is 76004,2345.

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Toshiba Goes It Alone

► The leading laptop maker thrives with its own product support forum.

Toshiba lappoppers are a fiercely loyal crowd. A visit to their hot new forum will show you why.

The fissioning of a CompuServe forum can be a delicate operation, but when the Toshiba Forum (GO TOSHIBA) split off from the PC Vendor A Forum in July, few doubted that it would survive. "Don Watkins, IBMNET's primary forum manager, told us that we were responsible for about 85 percent of the traffic there," says Hugh Faulkner, Toshiba sysop. "Since Toshiba considers CompuServe a force to be reckoned with, starting up our own forum seemed like the right thing to do."

Faulkner and fellow sysop Jim Rohrer, both Toshiba America employees, now provide full-time assistance to the forum's more than 2,100 members. "Our whole existence these days is based on the Toshiba BBS and CompuServe," Faulkner says, adding that "product support is rapidly becoming the major issue in computerdom. We're seeing a graying of the differences in hardware, and while some other forums offer similar help, Toshiba is one of the largest hardware makers that directly supports a forum."

There is clearly a voracious appetite for that support, as well as the data the forum provides. "What I appreciate most is getting the latest information on products, which I pass on to my clients, thereby showing them what a good idea it is to have a consultant around," says Don Singleton, a Tulsa-based computer consultant who also sells laptops and related equipment.

Warren Keuffel, a software engineer at Unisys and columnist for *Computer Language* magazine, sees another benefit. "I have a warm, fuzzy feeling knowing that if anything happens to my machine, I can get a response from a sysop or another forum participant within 24 hours—and frequently much sooner."

The two sysops garner praise from forum members. "I trust them to get me accurate information and answer questions quickly," says Leslie Nicoll of Portland, Maine, who has a Ph.D. in nursing. "Sometimes when you call the 800 number you get the run-around—'call later', 'please hold', and so on. The forum and sysops make it so much easier."

Like Keuffel and countless other forum members, Lynn Jordan, a technical support coordinator at Oregon's Portland Community College, has gotten fast answers to questions. "Among other things, I found out that the adapter I already had would fit the 1200XE I wanted, and how to treat my batteries better," she says.

Cheryl Tiller, a computer consultant in King George, Va., wasn't even sure what

COMPUTING SERVICES

Resume." Toshiba's exclusive Auto Resume is a major attraction, allowing users to turn off the machine in the middle of a program, then turn it on again and pick up where they left off. Another selling point is the company's Exceptional Care warranty, which stipulates free factory repair or replacement of any Toshiba within 48 hours for a period of one year.

So where can a Toshiba Forum member go to find a program to put a big, fat cursor on-screen, speed up a laptop's memory, get a solution to battery woes, find advice on software and resolve a thousand other dilemmas a lappopper faces? The forum's message board offers a chance for straight talk, and the libraries hold many answers.

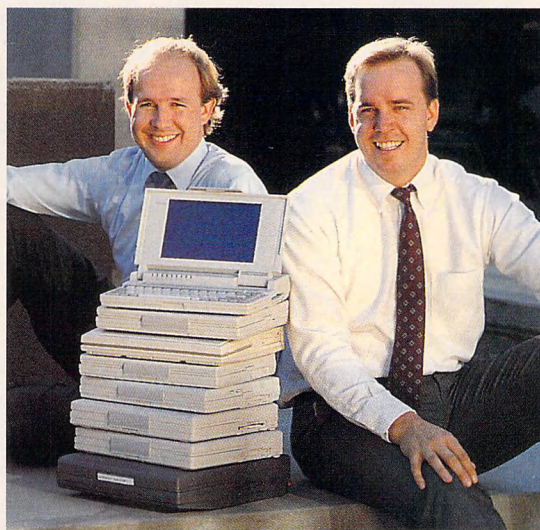
The message board is extensive, divided into 17 sections including such headings as General Information, Public Auction, Peripherals, Mature Computers, Lappers' Lounge, and one for each computer Toshiba makes. The latter sections are great places to find detailed data on a specific machine and to meet people who can tell you what you need to know. (See "The Toshiba Lineup" on page 26 for more information.)

Some message threads occasionally start to tangle up the rest. These, according to the sysops, are usually moved to Lappers' Lounge. A good deal of heated electronic debate takes place here, says Rohrer, but that just keeps things interesting. "It's always good to come out on the other side of a long, difficult thread and see the user still active in the forum."

The library has five sections—News and Press, Toshiba Utilities, Demo Files, Text Files and Other Utilities—and contains hundreds of files, programs and documents. These include press releases on all Toshiba machines and demo programs, shareware versions of programs such as PKZIP, an extensive message thread on the pros and cons of MNP modems, and much more.

For anyone with a Toshiba or the desire to buy one, this forum is a deep well of information that should be plumbed, and full of people who know what they're talking about. So GO TOSHIBA!

Douglas W. Jackson is a free-lance writer and editor living in Tokyo. His CompuServe User ID number is 76004,2312.



Forum was right thing to do: Sysops Rohrer, Faulkner

brand of laptop she wanted when she first ventured into the forum. "I'd heard good things about Toshiba, and the prices had gone down," she says, "but I had no idea whether I needed a T1000 or a T5200. After I followed forum discussions for a week, though, the choice was easy. The help I got from people here made a difference. Now I'm ready to go shopping, and I'll be coming home with either a T1600 or a T3100SX."

Toshiba laptops dominate the market for several good reasons. Says Keuffel: "Before I bought my T1000SE, I was also considering the NEC Ultralight and Zenith MiniSport. It became obvious, though, that Toshiba's keyboard and display reflected the engineering of a company more concerned about usability than including every new feature. The compromises Toshiba has made are more intelligent."

James Doody, a computer professional in Los Gatos, Calif., prefers "several Toshiba features, particularly the keyboard and Auto

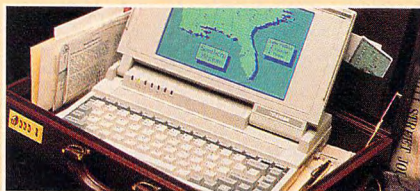
DANIEL FORT

The Toshiba Lineup

Toshiba's fully IBM-compatible laptops divide fairly neatly into two groups: battery/AC-powered supertwist LCD units and AC-only units with gas plasma screens (see below). (The elegant exception is the 3100SX, which combines battery/AC power and a gas plasma

display.) Pertinent features for each model, along with message sections, are listed below. Unless noted otherwise, the message section name corresponds to the computer model name.

Demo programs can be found in Library 3, "Demo Files."



Group A

T1000—Toshiba's entry-level laptop, weighing in at 6.4 pounds. One 720K drive, 512K RAM, CGA compatible, MS-DOS in ROM. (Section 2)

T1000SE—A favorite traveling machine of several forum members. 80C86 running at 9.54MHz, 1.44MB drive, 1MB RAM expandable to 3MB, backlit supertwist screen, 5.9 pounds, 640-by-400 resolution, CGA compatible, Auto Resume, modem slot. (Section 3, "T1000 SE/XE")

T1000XE—A 6.2 pound, 20MB hard-disk version of the T1000SE. MS-DOS 3.3 and LapLink in ROM, Auto Resume, dedicated modem slot. (Section 3, "T1000 SE/XE")

T1200—An 80C86-based laptop with 1MB RAM standard; math coprocessor socket. (Section 4)

T1200XE—An 80286 notebook PC featuring

a 20MB hard disk, PS/2-compatible 1.44MB drive, Auto Resume, HardRAM, and expandable memory up to 5MB. (Section 5)

T1600—A workhorse. 20MB or 40MB hard disk, disk cacheing, EGA display, internal modem slot, Auto Resume, hypertext documentation. Kurt Gebauer [70317,3615] is the forum's resident T1600 expert. (Section 6)



Group B

T3100E—A 40MB 80286 machine similar in features to the T1600; has double-scan CGA and an IBM-compatible half-length expansion slot. (Section 7)

T3200—40MB hard disk, two standard IBM-compatible internal expansion slots, switch-selectable power; comes with DOS 4.01 and PC Kwik software. (Section 9)

T3200SX—An 80386SX portable running at 16MHz with VGA-compatible screen, two IBM slots and a dedicated modem connector. RAM to 13MB, and 40MB or 120MB hard disk. (Section 10)

T5100—80386 chip, 100MB hard disk only, 2MB RAM standard, an EGA gas plasma display with graphics. (Section 11)

T5200/200—This 80386 machine comes with a 40MB, 100MB or 200MB hard disk. CAD/CAM and database capabilities, two IBM slots and Toshiba slot, VGA display. Full OS/2 support. (Section 12 "T5200")

T5200C—Comes with a color VGA display, 200MB drive, RAM to 14MB and two IBM slots. (Section 12, "T5200")

Others

T3100SX—A battery-powered 80386SX portable with VGA gas plasma display. Has IBM, 13MB, 40MB or 80MB hard disk. Contact John Deakin [76702,310] for details.

T8500—Toshiba's first desktop model, the T8500 is supported in Section 13.

Mature Computers—Models no longer in production, such as the T1100 and T3100, are supported in Section 14.

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Symantec Fulfills the Wish List

► Award-winning software is the fruit of CompuServe user feedback.

No awards carry more prestige in the computer industry than those from the Software Publishers Association. Composed of the industry's most conscientious publishers, the SPA gives awards on the basis of technical excellence in 41 categories. In 1989, Symantec, a publisher of programming languages and business applications for MS-DOS and Macintosh computers, walked away with five of these awards—more than any other software company—for three of its products: Q&A (an MS-DOS flat-file database and word processor), GrandView (a personal information manager for MS-DOS), and THINK C (a development system for the Macintosh).

Such awards are the result of a rigorous software development process. And for Symantec, an important part of that process is the Symantec Forum (GO SYMANTEC) on CompuServe.

The forum began more than six years ago as the LVT Forum, providing support for several business applications published by Living VideoText. When that company merged with Symantec, the LVT Forum was renamed and expanded to include support for all of Symantec's products.

The forum's sysop roster has become a veritable "Who's Who" of Symantec's foremost product support personnel. Judi Lowenstein, primary forum manager, is a long-time Symantec employee in charge of quality assurance for MORE, a Mac outlining and presentation graphics package. Other sysops include the developers of several products, technical support staff and customer service personnel. This concentration of technical expertise provides an ideal way for Symantec users to obtain authoritative answers to technical questions.

Equally important, the forum provides a means for the company's software development teams to directly exchange ideas with those who are most knowledgeable about their products' strengths and weak-

nesses: their customers.

"One of the big things we use the forum for is to get feedback from users. A lot of the input for our wish list comes from CompuServe," says Lowenstein. When it's time to upgrade a product, the wish list is evaluated by the development team, and the most practical features and improvements are implemented. In the case of MORE, this process has led to numerous improvements in the user interface, including the addition of several Command key options to bypass unnecessary dialogs, and the ability to import graphics into the program's Outline mode.

Another important function of the forum is to provide a means of communication with beta-testers via a private message section and library. All of Symantec's beta-testers are required to have modems, and a CompuServe account is strongly recommended.

John Friend, author of GrandView, describes CompuServe as an integral part of the process when he is working on a new product. He uses the Symantec Forum's beta-test section extensively. As each new feature is added to a program, Friend uploads it to the beta library, and then goes back to work. As feedback on each feature comes back to him, he refines the design and fixes any problems that occur. The result, he says, is that products can be more fully tested than was possible through traditional means.

Interacting with beta-testers via CompuServe has several other benefits. "I can read and respond to feedback on my time instead

of being interrupted by the phone," he says. Also, testers tend to provide more thorough bug reports online than when calling on the phone. The ability to send sample files for testing, the quick turn-around of messages to and from testers, and the freedom to work any time of day or night are a few more reasons Friend prefers CompuServe.

Of course, serving the day-to-day needs of Symantec's customers is the primary purpose of the forum. The libraries and message areas, organized by product type, contain valuable tools. In particular, the THINK C and THINK Pascal libraries are packed with source code and programming utilities useful to Mac programmers. The PIM/GrandView library consists primarily of printer and other device drivers for GrandView, while Library 1, "Data Management/Q&A," contains many how-to files and sample databases.

For Macintosh users who use SAM (Symantec AntiVirus for Macintosh) to protect their systems from viruses and Trojan horse programs, the forum performs another important function. As new viruses are discovered and characterized by Symantec's staff, SAM-compatible descriptions of these programs are uploaded to the forum, where they are immediately available to all SAM users.

The future of the Symantec Forum holds many changes. Chief among these is the addition of support for programs from Peter Norton Computing, which was recently acquired by Symantec. Lowenstein also would

like to add a knowledge base, with separate areas for common questions on each product, press releases, newsletters and classified ads. She also envisions more scheduled conferences, including discussions with the authors of Symantec's programming languages and the developers of Macintosh utility programs.

Jim Johnson is a free-lance computer music programmer and writer based in Tigard, Ore. His CompuServe User ID number is 75300,353.

COMPUTING SERVICES

Symantec's Prized Files

Here are a few of the Symantec Forum's hidden gems. To access the forum, GO SYMANTEC.

Tips for advanced users of Q&A. File QATIPS.ZIP, Library 1, "Data Management/Q&A."

More 3.0 Toolkit library containing templates. File MGRLIB.SIT, Library 2, "MORE/MORE II."

Press release describing version 3.0 of MORE. File MOR3PR.TXT, Library 2, "MORE/MORE II."

Time Line 4.0 demo version. File DEMO4.ARC, Library 3, "Project Management/Time Line."

GrandView tips and hints from a variety of users. File GVTIPS.ARC, Library 5, "PIM/GrandView."

THINK C routine for displaying rotated text on the screen or printer. File ROTATE.SIT, Library 6, "THINK C."

Common questions and answers on THINK C and THINK Pascal for the Mac. File TEKNOT.TXT, Library 6, "THINK C."

Shell program, written as a Pascal UNIT, that implements most of the Macintosh interface. File MIKEAP.SIT, Library 7, "THINK Pascal."

Smart Mutual Funding

MONEY MATTERS

CM's Money Matters Credo:

To the casual and serious investor alike, we vow to provide sanity when the bulls and bears run wild; indeed to explain and inform. Where money matters, we'll provide the means of attaining discretion and thus the better part of financial valor.

A Wealth of Fund Data

A Sample Search, p. 31

Small investors can find their way back into the market with *Money* magazine's FundWatch Online.

Like posters advertising a scary movie, stories about individual stock investors during the 1980s sported foreboding headlines. "Small Investors Fleeing the Market" and other similar headlines trumpeted the retreat of individual investors from US stock exchanges.

Driving them away were aggressive institutional investors. Armed with powerful computers and linked to instantaneous, global communication networks, these Wall Street wizards dominated stock trading. Individual investors, believing the playing field no longer level, began pulling their money out of individual stocks.

But Americans seldom give up without a fight. Seeing they couldn't beat the institutional behemoths at their game, individual investors decided to join them.

They found institutional investors who would invest for them. Called money managers, these expert investors manage the nation's more than 3,000 open-end mutual funds.

Money pouring in from individual investors transformed mutual funds into a major growth industry of the 1980s. From \$95 billion in January 1980, mutual funds ballooned to \$1 trillion by 1990. (That's \$1,000,000,000,000.)

Mutual funds allow individual investors to compete effectively with institutional investors. With investments as small as \$100, individual investors hire the services of savvy \$300,000-a-year mutual fund managers. These expert investors possess the investing prowess to compete profitably in today's volatile markets.

Mutual funds also provide investors instant diversification. A \$1,000 investment in a typical growth-and-income mutual fund buys interests in as many as 100 companies. This broad diversification lessens investment risk and increases the potential for consistent positive growth.

Mutual fund shares are also readily bought and sold. Unlike real estate and other

low-liquidity investments—which can take weeks or months to sell—mutual fund shares can be purchased and redeemed daily.

Selecting Winners

How can you identify top-performing funds suited to your investment goals and tolerance for risk?

Selecting winning mutual funds has been made easier through the *Money* Magazine Financial Information Center. An exclusive product offering to CompuServe members, this new database (GO MONEYMAG) features a mutual fund screening service that helps investors select top-performing mutual funds.

Named FundWatch Online by *Money* Magazine, this mutual fund database provides extensive data for more than 1,500 funds in eight categories. Veteran mutual fund investors will readily grasp the structure of this database and appreciate the wealth of data provided for each fund.

Novice investors, however, may be overwhelmed by the numerous choices. To help beginning investors make profitable use of FundWatch Online, we present here a brief primer on mutual fund investing.

Mutual funds are identified by investment objectives. The Investment Company Institute, a national association of mutual funds, identifies 22 investment objectives. However, all objectives focus on achieving one or more of three main goals:

- ▶ Growth: increasing the value of your principal through capital appreciation.
- ▶ Income: generating a steady stream of income payments.
- ▶ Preservation of capital: protecting your principal from the risk of loss.

FundWatch Online groups mutual funds in eight investment objectives. Four have growth as their primary objective: aggressive growth, growth, international and precious metals. Two strive to balance growth and income: balanced and growth-and-income. The remaining two focus on income: municipal bonds and taxable bonds.

Not listed on FundWatch Online are money market mutual funds. Virtually all mutual fund companies feature a money market fund. The sole purpose of these funds is preservation of capital. Money market funds invest in short-term securities that

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Assets & Yields		Expenses & Risk	
Obj:	Growth	Maximum Load Fee (%):	3.00
Total Assets (Mil\$):	11319	Annual Expense Rate (%):	1.01
Net Asset Value Per Share:	49.56	Redemption Fee:	NO
Asset Allocation—% Cash:	.0	12b-1 Fee:	NO
Asset Allocation—% Fixed:	11.2	Beta Coefficient:	1.010
Asset Allocation—% Equity:	88.8	Alpha Rating (10-1):	8
Latest 12-Mo Divd Yield (%):	2.80	Risk Rating (10-1):	8
SEC482 % Yield— 6/30/90:	N/A	Diversified vs. S&P 500 (%):	95

Performance Ratings		
Overall Rating (10-1):	4	Rating in GR Group (10-1): 5

Relative Performance							
As of 10/31/90	Curr Month	Curr YTD	1YR	3YRS	5YRS	10YRS	Bull 11/87 5/90 Bear 5/90 10/90
Fund % Return	-1.23	-14.10	-12.17	12.64	14.90	21.06	86.6 -17.2
Avg. GR Fund	-1.6	-14.0	-11.5	8.5	10.6	10.8	64.2 -17.1
S&P 500	-.3	-11.4	-7.5	10.3	13.7	13.7	71.0 -14.5
GR Group Rank	6	5	5	10	10	10	10 5
Overall Rank	4	3	3	10	10	10	10 3

Portfolio By Sector(%)			Top Stock Holdings			
Sector	Fund	S&P 500	Stock Name	Mkt Value (\$000)	% Port	
Basic Industries	5	7	FEDERAL NATL MTG ASSN	498,620	6.0	
Cap Goods & Tech	13	16	PHILIP MORRIS COS INC	339,375	4.1	
Consumer Cyclical	19	15	SMITHKLINE BEECHAM ADR	123,618	1.5	
Consumer Stable	18	21	GENERAL ELEC CO	104,095	1.2	
Energy	4	12	INTERNATIONAL BUSINESS	101,056	1.2	
Finance	21	8	UNILEVER N V ADR	98,425	1.2	
Transportation	2	2	STUDENT LOAN MKTG ASSN	84,566	1.0	
Utilities	11	14	ENTERGY CORP	83,564	1.0	
Miscellaneous	7	5	UNITED TECHNOLOGIES COR	80,370	1.0	
			BOEING CO	74,925	.9	

— Weighted Avg. P/E Ratio —		Weighted Average Cap. (Bil\$)	
Fidelity Magellan Fund	16.9	Fidelity Magellan Fund	9.1
S&P 500	18.9	S&P 500	17.3

A mutual fund's assets, risk, ratings, performance and holdings: Sample FundWatch report

have low investment risk. They are managed so their share value, called the net asset value, always stays fixed at one dollar.

Money market funds are excellent repositories for emergency reserves. Financial advisors typically recommend that investors keep three to six months living expenses in such reserve accounts.

Your goal should be to build a portfolio of mutual funds, according to Tyler Mathisen, assistant managing editor for *Money* magazine. Why?

All investments experience up and down cycles. If you invest in only one type of

mutual fund—for example, growth funds that invest in common stock—your investment will perform dismally when stocks are out of favor. With a diversified portfolio, you lessen your chances of all your investments languishing at the same time.

How you divide your money among multiple mutual funds depends on your age, financial goals and appetite for investment risk. Of these, the most difficult to quantify is investment risk. However, some rules-of-thumb apply.

Generally, the greater your potential for high return, the greater becomes your risk

FundWatch for Free in January

As part of a special online offer to CompuServe subscribers, *Money* magazine is waiving the \$15 per hour surcharge for FundWatch Online for the entire month of January.

FundWatch Online is a powerful yet easy-to-use online product that screens and displays detailed information on more than 1,500 mutual funds. Take advantage of this special opportunity to look for mutual funds that match your investment philosophy. GO MONEYMAG.

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of financial loss. For example, aggressive growth and precious metals funds afford investors high-growth potential. With this high-growth potential comes a correspondingly high level of investment risk.

Growth and international funds offer potential for impressive returns with significantly lower risk than aggressive growth and precious metals funds. Nonetheless, these categories invest in common stocks, which means their returns fluctuate with the vagaries of world stock markets.

Growth-and-income and balanced funds are less risky because they balance their growth potential from stocks with steady income from stock dividends and bond interest.

Municipal and taxable bond funds offer the lowest risk of the eight investment objectives used by FundWatch Online. However, these funds are not risk-free. Bond investments are influenced inversely by changes in interest rates. This means their value goes down when interest rates go up, and vice versa.

Just as investors should not put all their money into stocks, nor should they put all their money into bonds and other interest-sensitive securities.

FundWatch Online provides extensive data for each fund. In addition to performance, risk and expense data, FundWatch Online lists asset allocation percentages, yield data, major security holdings and sector diversification for both stocks and bonds.

Experienced investors find FundWatch Online's sector diversification information especially useful. Each fund's holdings in eight industry sectors is identified by percentage and compared to percentage holdings of the Standard & Poor's 500 stock index. Weighted price earnings ratios and average capitalization ratios are also provided for each fund and compared to the S&P 500.

A fund's bond holdings are also identified by sector. FundWatch Online indicates the number of issues and dollar value for indus-

trial, utility, financial, government and mortgage-backed bonds. FundWatch Online also provides for each bond sector averages for yield-to-maturity, coupon, maturity, duration and credit quality.

Offline analysis of each fund's data can help reduce choices for a growth fund to two candidates.

Then, using telephone numbers supplied by FundWatch Online, users can request prospectuses for each fund from the respective mutual fund companies. Though written in dry and often boring legalese, prospectuses are important sources of information.

When calling for the prospectus, investors should also request a key piece of information not included in FundWatch Online: the name of the manager (or managers) currently managing the fund, and how long he or she has been in that position.

Why is this important? Because a fund with stellar performance data loses some of its appeal if the manager who compiled the record is no longer managing the fund.

Thus, it is also important once you have invested in a mutual fund to regularly check on its manager. Though the exit of a manager is not always a reason to exit a fund, many experienced mutual fund investors prefer to sell their shares when a fund changes managers.

Neither *Money* magazine nor FundWatch Online can guarantee that a fund that performed well in the past will perform well in the future. However, if the manager or managers who compiled the impressive performance record are still running the fund, you increase significantly your odds for success by going with proven winners. And using FundWatch Online by *Money* Magazine increases your odds of finding those winning mutual funds.

Robert Cullen is an independent financial and computer journalist based in Alta Loma, Calif.

MONEY MATTERS

Reacting to Recession

Except for some nastiness during 1987, mutual fund investors enjoyed favorable investing conditions during the 1980s.

Not so during 1990. Roller-coaster movements in bond and stock markets have caused investors to question their faith in mutual funds. "Lighten up on yourself" is the advice proffered by investment experts.

"Witness the number of professional investors who fail to accurately predict market turns," says Robert Levy, chairman of CDA Investment Technologies. CDA supplies the mutual fund data for FundWatch Online.

Even if investors correctly predict market downturns and move their money into safe havens, they face another equally daunting challenge: When should they move their money back in to benefit from the coming prosperity?

This double-barreled quandary is the reason most investment experts advise investors to build diversified portfolios. A properly balanced portfolio of funds will minimize losses in down markets and garner good returns in up markets.

What is proper diversification? Tyler Mathisen, assistant managing editor of *Money* magazine, cites 30 percent stocks, 25 percent bonds, 40 percent cash and equivalents, and 5 percent in real estate and gold as a portfolio that would probably be well insulated against severe market downturns.

Once you've built your portfolio, keep faith in your choices. "Don't move your money at every twitch of the headlines," advises Mathisen. In other words, do your homework before the recession. Then grit your teeth and wait for good times to return.

The Financial Information Center

- ▶ **FundWatch Online by *Money* Magazine:** Screen a database of more than 1,500 mutual funds to find superior performers tailored to your personal criteria. A surcharge of \$15 per hour is added to normal connect charges for this service.
- ▶ ***Money* Magazine Online:** Increase your knowledge of key financial matters by reading selected full-text articles written by *Money* magazine staffers. These articles provide timely insights and practical advice on mutual fund investing, planning your retirement, paying

taxes, saving for a college education, managing family finances, buying a portfolio of securities and more. They are designed to help you plan for life's biggest financial challenges.

- ▶ **WealthBuilder Forum:** Owners of WealthBuilder by *Money* Magazine PC software can share insights, solve problems.
- ▶ **Current Quotes:** Check current securities prices using CompuServe's Quick Quotes database. Added fees of 7 cents per quote during stock exchange trading

hours (9:30 a.m. to 4 p.m. ET), and 2 cents per quote all other times are charged for this service.

- ▶ **Money Store:** Subscribe to *Money* magazine for yourself or a friend, purchase financial software or a money-managing video through this section.
- ▶ Each year, *Money* magazine publishes two special mutual fund issues. Back copies of these issues may be acquired for \$3.25 per copy by writing Back Issues, MONEY, 1271 Sixth Ave., New York, NY 10020.

How to Use FundWatch Online

Let's construct a portfolio for a married couple, both 40 years old and parents of two children. Our couple, Robert and Betty Sample, need to save for their children's college education and their own retirement. They have set aside in money market funds sufficient reserve to cover four months of living expenses. After reviewing their income and expenses, they determine they have \$10,000 to invest in mutual funds, to which they can add \$600 per month.

Prior to signing onto FundWatch Online, the Samples read up-to-date articles about education and retirement planning in *Money Magazine Online*. After this research, the Samples decide to establish a mutual fund portfolio allocated to 30 percent growth, 20 percent international, 30 percent growth-and-income, and 20 percent income.

Selecting FundWatch Online from the *Money Magazine Financial Information Center* main menu, the Samples are asked if they want to examine a specific fund or screen the database. They choose to screen the database.

The next menu asks how FundWatch Online should rank the funds selected by the screening. Choices include current year-to-date, latest bull market, latest bear market, and annualized returns for one-, three-, five- and 10-year periods.

This is not a crucial decision, because all of this performance data is provided for each fund. Some financial advisors argue in favor of five-year annualized return figures, because they show current performance plus give some historical insight. The Samples choose five-year annualized ranking.

The next menu lists FundWatch Online's eight investment objectives. Deciding to screen first for a growth fund, the Samples choose the Growth category.

FundWatch Online indicates more than 300 funds are classified as growth funds. The Samples then are presented with this menu:

- 1 Display Funds
- 2 Restore Prior Selection
- 3 Begin New Search
- Narrow By
- 4 Fees and Expenses
- 5 Performance
- 6 Assets
- 7 Management Company
- 8 Yield and Risk

This is the basic screening menu investors use to narrow the number of funds selected.

The Samples want growth funds that have provided higher-than-average returns while assuming less-than-average risk. Selecting Option 5, "Performance," brings this menu:

Performance

- 1 Fund Return (By Period)
- Relative Performance
- 2 Overall Rating
- 3 Investment Objective Rating
- 4 Overall Ranking (By Period)
- 5 Investment Objective Ranking

The Samples select "Overall Rating," which displays this menu:

Find funds with the following overall performance rating

- 1 Very High
- 2 High
- 3 Average
- 4 Low
- 5 Very Low
- Range
- 6 High to Very High
- 7 Average to Very High

The Samples choose "Average to Very High." This reduces the number of funds meeting their criteria to 175. FundWatch Online then re-presents the main screening menu. This time, the Samples choose Option 8, "Yield and Risk," which brings this menu:

Yield and Risk

- 1 Twelve-month Dividend Yield Risk
- 2 Market Sensitivity (Beta)
- 3 Risk Rating
- 4 Risk Adjusted Return (Alpha) Rating

The Samples choose "Risk Rating," which leads to this menu:

Find funds with the following risk rating:

- 1 Very Low
- 2 Low
- 3 Average
- 4 High
- 5 Very High
- Range
- 6 Very Low to Average
- 7 Average to Very High

The Samples choose Option 6, "Very Low to Average," which narrows the search to 19 funds.

They restrict this group further by specifying that they want only growth funds with expense ratios below 1.5 percent. At the main screening menu, they select Option 4, "Fees and Expenses," which brings up this menu:

Fees and Expenses

- 1 Load Fee
- 2 Redemption Fee
- 3 12b-1 Fee
- 4 Annual Expense Rate

They select Option 4, "Annual Expense Rate," which brings this menu:

Find funds whose annual (%) expense rate is below:

- 1 One-half
- 2 One
- 3 One and one-half
- 4 Two
- 5 Three
- 6 Six

They select "One and one-half." This reduces to eight the number of funds meeting their criteria and thus provides a manageable group for further analysis.

—RC

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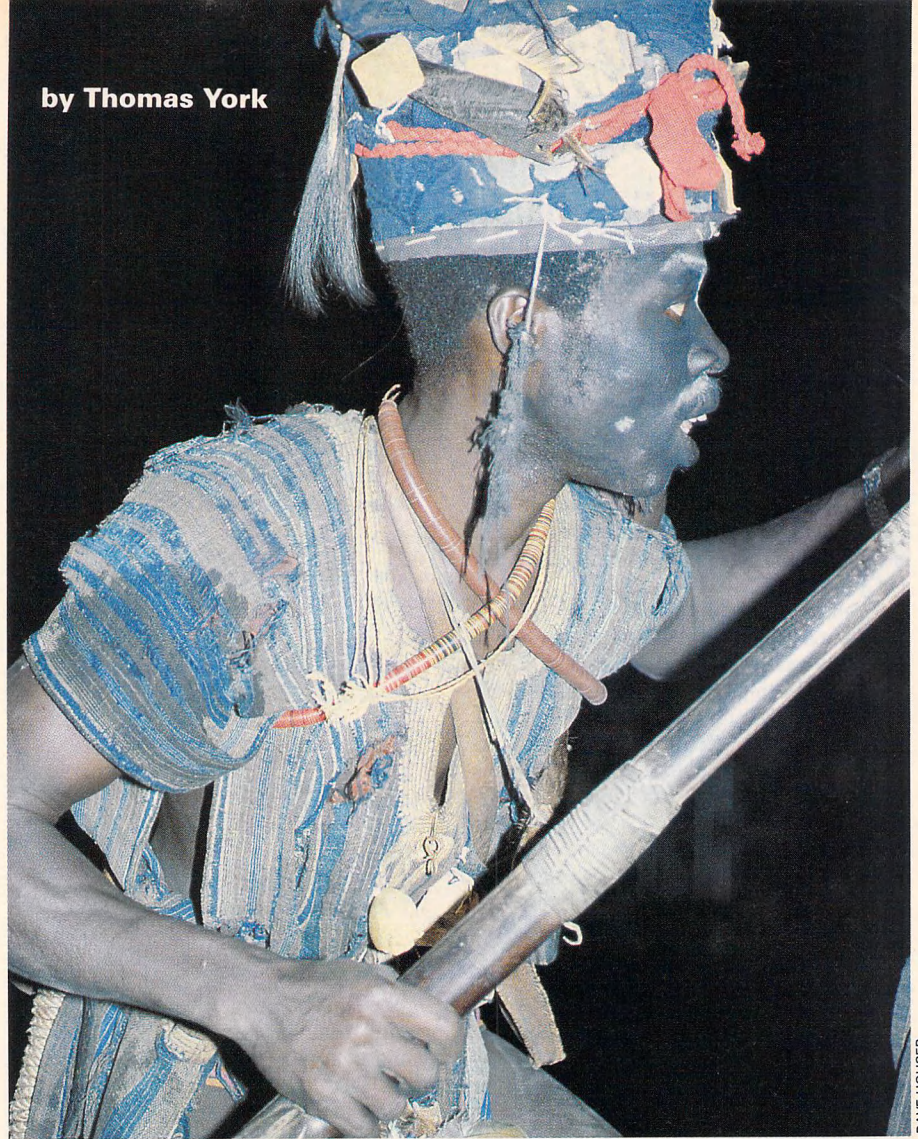
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Protecting future well-being with ancient rituals and incantations: Fetish-adorned dancer

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▼
Bargaining
with the Bokonos

▼
Togo Guide, page 34

▼
A Shot of Prevention,
page 36

Welcome to Togo, a tiny slice of West Africa with European-style resorts and a voodoo supermarket.

"So what would you like today? Something to make your girlfriend return your love? Something to make you strong and virile? Or something to protect you when you travel?"

I have journeyed to the "Be" fetish market, a dry, dusty compound at the edge of Togo's capital city, Lomé. The man yelling like a barker on a carnival midway is Paul Tchoumado, a short black man who speaks English, heavily accented with French and his native Ewe.

"They're all for sale," he bellows, pointing to displays of unusual objects lying about him on the ground. "Let me show you what I have."

Togo, a sliver of West Africa wedged between Ghana and Benin on the Bay of Benin, is one of Africa's smallest countries and one of its most popular resorts. Many Swiss, German and French tourists have discovered that Togo, which is six hours from

Europe by air, is the perfect escape from midwinter blues.

Moreover, during the past decade, Togo has drawn increasing numbers of US visitors seeking adventures off the well-trod resort circuit. With a stable government and economy, Togo is considered a safe way to sample the exotic sights and sounds of the African continent.

Indeed, Togo offers a number of worthy sites, including wildlife preserves along the Mono River northeast of Lomé, where giant hippopotamuses wallow in murky waters. But, visitors need not venture beyond the city limits to experience the fetish market, a primitive bazaar for local natives who practice voodoo. The ancient rituals are still performed within the shadows of the Christian church spires, which dominate Lomé's modest, post-colonial skyline.

The history of voodoo is intertwined with the history of West Africa. The Ewe brought voodoo to Togo when they migrated from Nigeria in the 15th century—about the time the first Europeans arrived. The Ewe stayed, and so did the Europeans. Ultimately, the Germans and then the French became the dominant powers, and the Ewe became a source for slaves. In the 17th and 19th centuries, the French exported the slaves and their voodoo beliefs to such places as Brazil,



Mud is used to build fortress-like compounds: North Togo



Beaches, mountains and savannahs: Togo and West Africa

Haiti and the West Indies.

In Africa, voodoo is closely connected to animism, a primitive form of worship in which practitioners believe that unseen spirits lurk in the shadows of every tree and bush in nearby jungles. Animists believe in reincarnation and in other figures who act as intermediaries between man and god. Today, the 500,000 Togolese Christians mix Christian beliefs with animist traditions.

In Lomé, the fetish market serves as a huge supermarket for the traditional voodoo healers in and around the city. In the hustle and bustle of day-to-day business, the market looks out of place. It has the look and feel of Africa before the Europeans arrived. On the compound, you will find for sale such items as monkey heads, parrot beaks, snake skins, chicken feathers and animal-hair whisks. Also sold are various wrought-iron implements, such as *gatokoe* or cow bells, sometimes used in voodoo ceremonies.

The fetish market is not the only place where the powers of voodoo hold sway. Students of African voodoo can journey to Togoville, a small village on the shore of Lake Togo that gave its name to the entire country when the Germans arrived in 1884.

Travelers arriving by canoe are picked up and deposited onshore by waiting porters. Students from surrounding schools guide tourists through the village in exchange for a few coins or felt-tip pens.

Togoville's village chief, Prince Hertier A. Plakoo Mlapa, is a doctor of occult medicine. (His grandfather signed the treaty that handed Togo over to the Germans in 1884.) His subjects still regularly practice voodoo, as evidenced by the wood carvings found in front of many homes and buildings.

In 1985, Pope John Paul II visited a German-built church that sits on a hillside above Lake Togoville. It features windows decorated with the stained-glass images of

22 African martyrs now officially recognized by the Vatican. The pope said that Africa's primitive beliefs could exist side-by-side with mainstream Catholicism.

Close by, near the coastal village of Glidji, visitors can see an untouched forest, where belief has it that there resides all of the magical power deposited by Ghanaian fishermen when they left their homeland hundreds of years ago. Ghanaians continue to fish the waters off Togo's wide, sandy beaches from their *pirogues*, dugout trunks fashioned into long, narrow boats.

Each September, the villagers sacrifice livestock, dive for sacred stones in Lake Togo and hold trance-inducing chants after their evening feasts. The three-day event is so important to the people that Togo President Gnassingbe Eyadema attends to lend his official presence to the festivities.

At the fetish market at Lomé, the mystique of voodooism stands in stark contrast to city life. The market is not for casual strolling or shopping, as the smell can be quite overwhelming. It was once located on the edge of the *grand marché* near the city center until officials decided to move the acrid odors away from the regular market.

Paul Tchoumado does not look like the kind of man who would sell you snake oil, much less a snake skin. He looks more like one of the local Ghanaian taxi drivers than a medicine man. In his native language of Ewe, he is a *bokonon* or traditional healer. (It is demeaning to call him a "witch doctor," a pejorative term often misused by Westerners and disdained by the *bokonos*.) He is treated with as much reverence from the Togolese as the Christian priests and missionaries spreading the gospel throughout the countryside.

Part guide, part sorcerer and part salesman, Tchoumado derives most of his income selling curios and amulets to tourists. Like the other *bokonos*, Tchoumado speaks a se-

cret language and strictly observes religious taboos and customs to better communicate with the spirits. During voodoo ceremonies, *bokonos* often enter deep trances and speak with the "other world." They sometimes dem-



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onstrate their supernatural powers by cooking chickens without fire or swallowing razor blades.

At the fetish market, Tchoumado greeted me at the center of the compound and lead me to his cramped office, actually a stall constructed from discarded timber and banged-up corrugated tin panels.

He asked my name, then plopped a few cowrie shells (once used as currency in West Africa) into a cup of water before tossing them onto the floor. The scattered shells give divine approval to proceed with the demonstration.

Tchoumado described the power of each item in his inventory. The fetishes, charms and amulets represent natural forces—such as fire, water or wind—or those of the dead. They are designed to protect his clients from spirits that threaten not only personal safety, but also their physical, mental and emotional well-being.

He demonstrated an item popular among travelers. It looks like a twig snapped from a tree with a tiny, deep hole gouged in the

middle. Another twig is connected with a piece of string and is shaped to slip into the hole, representing a telephone. A traveler pretends to call home on it, to protect his or her family's welfare.

For other objects, the owner must perform complicated rituals, offering a series of movements with the hands while repeating incantations. Tchoumado

says it is important to follow his precise instructions to get the fetishes to perform correctly.

The objects cost as little as \$1 up to \$5—the price he asks for a small doll that protects a home from evil spirits. As in other places of commerce in Togo, bargaining is expected. The final price is as much as one-third off the asking price.

I bought an amulet to help me generate more income for my free-lance writing business. Tchoumado pulled out something that looked like a rock covered with a chicken feather dipped in blood. He instructed me to place several drops of perfume on it, chant a few words, then touch my lips with the per-

fume drawn from the fetish.

Tchoumado wished me good luck, but as I departed his stall, I bumped my head on the overhead door post, creating quite a commotion among the other *bokonos*. Even my Togolese driver, a man who heretofore appeared unperturbed by the market, looked concerned. He said it is extremely bad luck to break the skin and draw blood, which would portend dire things in my future.

Tchoumado examined my scalp like an emergency-room doctor diagnosing a patient with a serious wound. The other *bokonos* gathered around him. Fortunately, no damage had been done—the skin was intact. His concern disappeared, and he resumed his sales pitch.

"How about something to improve your luck?" he asked. Tchoumado flashed a big smile and nodded goodbye as I jumped into my van and sped down the dusty road toward the city center. I was relieved to be leaving Togo's fetish market before my good fortune changed for the worse.

Thomas York is a free-lance business and travel writer based in San Francisco.

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Go to Togo: A Visitor's Guide

The Country

Togo is a small West African nation bordered by Ghana, Burkino Faso and Benin. The population is 3.1 million, consisting of 42 cultural and ethnic groups.

For adventurers seeking experiences beyond the winter ski resorts of Europe or the sun-drenched islands of Hawaii or the Caribbean, Togo offers much that is different to see and explore, including the "Be" fetish market and voodoo priests in rural villages.

The landscape ranges from palm-lined beaches on the south to green mountains in the midsection to broad, brown savannahs in the north. Lomé, the capital, is a small, accessible city, with the ambiance of a small town rather than a national capital. It serves as a regional center for business and commerce, and it is well known for its European-styled restaurants, discos and nightclubs.

Getting There

Sabena flies twice a week to Lomé from New York via Brussels with a range of reasonable fares. Air Afrique also has twice-weekly service from New York to Togo via

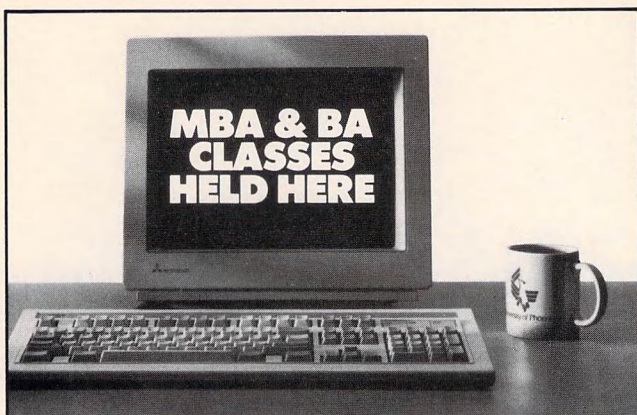
Dakar, Senegal. Other international carriers serve West Africa through the major capitals of Europe. These carriers include KLM, UTA, Air France and Swissair. Consult the Official Airline Guide (GO OAG), Eeas Sabre (GO SABRE) or Travelshopper (GO PARS) for details.

Numerous travel companies offer West African tour packages, including stops in Senegal, the Ivory Coast, Togo and Mali, with its legendary Timbuktu in the Sahara Desert. Stopovers in Togo include a visit to the fetish market, a photo safari to the Keran game preserve and a trip to the national art center in Kpalime. Consult ZapoDel's Adventure Atlas (GO OAG) tour packages.

Accommodations

The top hotels in Togo are government-owned hotels operated by top European hotel chains, including the Hotel du 2 Fevrier in the city center, the Hotel Sarakawa on the Bay of Benin and the Hotel de la Paix on the Boulevard de la Marina.

For visitors seeking bargain lodging, the best bet is the Hotel du Golfe, a comfortable



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Colorful cotton *pagnes*: Togolese woman

place near the *grand marché* or market place. The hotel features a shaded outdoor bar and a pool in the garden courtyard. There are other government-owned hotels near major tourist centers, including the Hotel du Lac near Togoville. This hotel is closed in the torrid months of June and July.

Hotel information is available online in the ABC Worldwide Hotel Guide (GO ABC), Eaasy Sabre, Travelshopper and the Official Airline Guide.

Restaurants

All of the major hotels have good restaurants. The high-rise Hotel du 2 Fevrier features a first-class restaurant atop its 36-story tower. Diners get a commanding view of Lomé and southern Togo from Ghana to Benin.

For other restaurant listings, write the Togo Information Service. One out-of-the-way place worth trying is the Ramatou, seven miles east of Lomé off the Coast Road on the Bay of Benin. It specializes in serving fresh seafood from the waters off Togo. Try the Togolese dish called *fufu*, a potato-like dish, with Ramatou's chicken brochettes and okra gumbo with shrimp and lobster.

Shopping

The *grand marché* in the center of Lomé is a good place to look for hand-carved figures and other wooden crafts. Ebony and mahogany carvings are inexpensive here. Visitors will find a wide selection of colorfully patterned cotton fabrics called *pagnes* favored by Togolese women.

Malachite also is a bargain. Don't worry about finding it. Dealers will approach visitors in the street with bracelets and necklaces crafted from bits of the stone. If you are a good bargainer, you will be able to get a necklace for as little as \$12, compared to similar pieces costing as much as \$100 in the United States.

At the Kloto Craft Center near Kpalime, not far from Lomé, native artisans make batik, pottery and macrame, as well as wood carvings made from mahogany, ebony and teak.

Languages

French is the official language. English and German also are spoken in hotels, major

shops and restaurants in Lomé. The two major local languages are Ewe and Kabyle.

Currency

The local currency is the Franc CFA, which is tied to the French Franc (1 FF to 50 CFA) and used throughout French-speaking West Africa. American Express, VISA, MasterCard, Diners Club and Carte Blanche are accepted in major hotels and restaurants, but it's best to carry local currency and travelers' checks. For online information, type FIND CURRENCY.

Entry Requirements

No visas are required of US or Canadian citizens visiting Togo. They are required, however, for neighboring countries. Immunization against yellow fever is no longer necessary. Visitors should take pills for protection against malaria if they travel to infected regions throughout Africa. (See "It's Worth a Shot" on next page.)

Where to Write

For more information about Togo, contact the Togo Information Service, 1706 R. St., N.W., Washington, D.C. 20009. The telephone number is 202/667-8181. Office hours are from 9 a.m. to 5 p.m., Monday through Friday. And don't forget to consult the Travel Forum (GO TRAVSIG) to communicate with those who have been there.

—TY

It's Worth a Shot

► Vaccination and health data for globe-hopping travelers is online.

Exotic places have exotic cultures. They also have exotic diseases.

The United Nations' World Health Organization is the principal gatherer of information about disease outbreaks around the world. It then supplies the data to its member nations. In the United States, this is handled by the Center for Disease Control, an agency under the US Department of Health and Human Services.

Rosamond Dewart, chief of the Travelers' Health Section at the CDC, says it is her agency's plan to make *Health Information for International Travel* accessible online within a year. This annual volume is distributed to some 13,000 travel agencies and health centers around the country. And it can't happen too soon: The book is a gold mine for travelers seeking vaccination and other health information.

Take Togo as an example. The regional list of diseases relating to Togo is extensive and quite daunting: malaria, river blindness,

sleeping sickness, various forms of typhus, polio and Lassa fever, to name just a few. However, as the book notes, the occurrence of these diseases is often localized. The information is provided to travelers in the spirit of "forewarned is forearmed."

Yellow fever is the only disease requiring an International Certificate of Vaccination for those traveling directly from the United States. The certificate is required for travel to the following African countries: Benin, Burkina Faso, Cameroon, Central African Republic, Congo, the Ivory Coast, Guinea, Gabon, Ghana, Liberia, Mali, Mauritania, Niger, Rwanda, Sao Tome, Principe and Senegal. Togo no longer requires immunization against yellow fever.

And certificates are no longer required for cholera. "The risk of cholera to US travelers of any age is so low that it is questionable whether vaccination is of benefit," states the CDC in *Health Information for International Travel*. However, Pakistan, Sudan

and Pitcairn (in the far Pacific) do require certificates of vaccination against cholera if a traveler enters their countries from an infected country. So, if you travel from the

United States to India, you need no vaccination against cholera, even though the disease is present in India. But if

you travel from India (an infected area) to Pakistan (or Sudan or Pitcairn), vaccination is required.

Plague also requires no certificate. It occurs in many countries, including the western third of the United States, but in such small numbers as to pose no threat to travelers.

CompuServe members can access vaccination and disease information through the Travel Forum, the Official Airline Guide Travel Service, Visa Advisors, Health Database Plus and IQuest.

The Official Airline Guide (GO OAG) provides information about vaccination requirements by country. Select Option 5 from the main menu to access the Regional menu and from there select the country of choice. Option 4 on the Country menu, "Documentary Requirements," lists vaccination information.

Another useful port of call is the Department of State Travel Advisories (GO STATE). Travelers are alerted to overseas crises, including serious and sudden outbreaks of a disease.

Visa Advisors (GO VISA) lists requirements for visas and passports as well as immunization requirements for travelers.

Visit the Travel Forum (GO TRAVSIG) to meet people who have "been there," both in terms of travel to your destination and the vaccination experience. Search Library 0, "General Interest," using the key word "health," to see what information is available. For example, the file MLARIA.TXT offers the pros and cons of various anti-malarial drugs, while WATER.TXT gives health tips on contaminated water.

For further information about vaccinations and health, access Health Database Plus (GO HDB) for articles and abstracts, such as "Yellow Fever in West Africa: a Retrospective Glance," which appeared in the Dec. 23, 1989, edition of the *British Medical Journal*. IQuest's Comprehensive Core Medical Library contains articles of a similar nature (GO IQUEST). And finally, CDC maintains a 24-hour travelers' information line at 404/332-4559 for callers with touch-tone phones.

Philip Bishop is a writer and graphic designer based in Narragansett, R.I.

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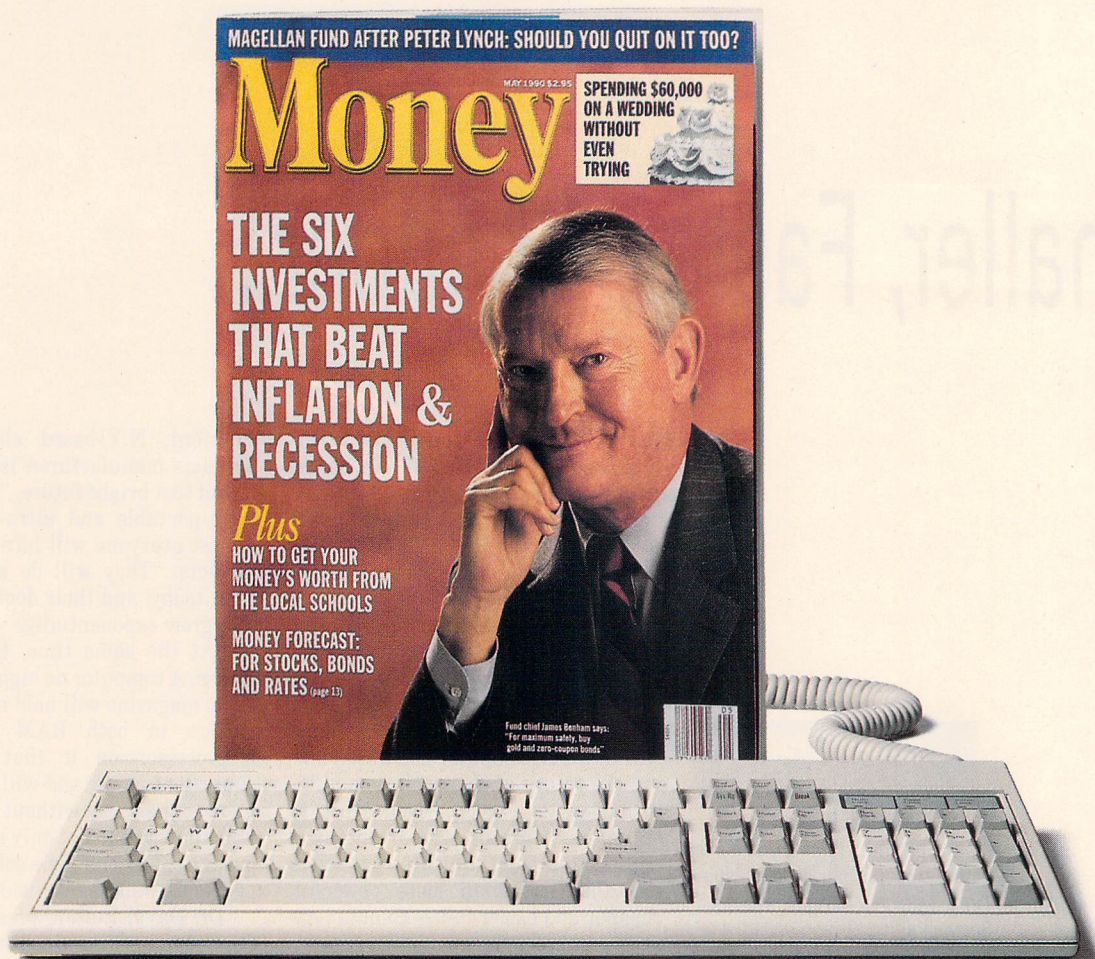
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Smaller, Faster, Cheaper...

What's ahead for computer communications technology? We asked some who are working on it.

Writer Ambrose Bierce defined the future as "that period in time in which our affairs prosper, our friends are true and our happiness is assured."

But ol' Ambrose was a first-class master of sarcasm, a man whose cynical outlook on life earned him the wry nickname "Bitter Bierce." Nevertheless, he certainly would have enjoyed these times—a period in which computer users are viewing the future of electronic communications with a goggle-eyed sense of optimism. After all, who among us is willing to predict a future that offers anything less than more powerful, cheaper and easier-to-use communications technology?

But Ambrose Bierce and optimism aside, we all want to know what's coming down the road. The best way to find out—or at least hear an educated guess—is to listen to the industry leaders who are currently planning the products we'll be using in the near future. And if you listen to these people closely enough, you'll discover that they too sound optimistic.

Faster and Smaller

"Computers are getting smaller, lighter and more powerful," notes Philippe Kahn, chairman, president and CEO of Borland International, the Scotts Valley, Calif.-based software publisher. "Advances in computer communications enable me to set up an office on the road. No matter where I am in the world, if I've got a phone jack, I'm up and running."

Kahn feels that the trend toward smaller, more portable computers will continue during the next decade. "I believe that in the early 21st century we'll see a totally cellular personal computer—the power of a mainframe on a laptop computer that doesn't need recharging!"

Mike Weiner, president of Microlytics, the

Pittsford, N.Y.-based electronic reference products manufacturer, is similarly looking ahead to a bright future. "Computers will be ultra-portable and ultra-powerful, so that almost everyone will have at least one," he predicts. "They will do a great deal more than today, and their degree of connectivity will grow exponentially."

"At the same time, their size will decrease. A computer no bigger than an issue of *Time* magazine will hold megabytes of information in both RAM and ROM, have a processor on it that provides 80386-equivalent power and will hook into systems all over the world without wires. The display will allow you to not only see high-resolution graphics, but real-time color images of other people as well as television."

Dr. David Fulton, president and CEO of Perrysburg, Ohio-based software publisher Fox Software, sees a gradual shift toward faster data-transmission speeds. "This trend has already begun, with 300-baud modems yielding to 1200 to 2400 and now to the beginnings of the proliferation of 9600-baud modems at popular prices." Fulton also predicts a move toward integrated voice, video and data communication. "Digital ISDN, now the province of only the richest companies, will begin to filter down to all businesses and, eventually, to the home. Fiber optic communications, now used in some local area networks and long-range telecommunications, will also spread throughout society."

Ed Juge, director of market planning for Tandy Corp.'s Radio Shack division, sees an "explosion" in modems and low-cost home computers. "Currently, less than half of our computer buyers include a modem with their initial or early follow-in purchases. We expect that percentage to increase greatly in the next three or four years." As more computer owners become communications-savvy, Juge predicts, "unlimited new opportunities for simplified electronic messaging—with services dialing subscribers to deliver messages rather than waiting for subscribers to call and inquire."

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▼
Logging on Anywhere,
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▼
The Unfair Science
Fair Advantage, p. 40

Looking to GUIs

Said Mohammadioun, CEO and president of Samna Corp., an Atlanta-based software publisher, believes that sophisticated graphic user interfaces (GUIs), along the lines of the Macintosh's display and Microsoft Windows 3.0, will power future communications. "Because GUIs make complex operations transparent, a high level of computer skill will no longer be required to initiate and perform once-complicated communications operations," he notes. "It is possible that by the 21st century electronic mail systems will rival the traditional postal service. Over time, modern communications of all types will become increasingly simple, with access to a bulletin board or nationwide e-mail system as easy as selecting an icon on-screen."

Dennis Crumpler, president of XcelleNet, an Atlanta-based network products maker, also sees a bright future for GUIs in communications. "As graphical interfaces make networks easier to operate, training time for personnel will be greatly reduced." Crumpler feels that the graphic interfaces will be of critical importance to the design of networks. He notes that "GUIs will allow all employees—from administrative to sales personnel to high-level, non-technical employees—to take advantage of the instantaneous communications these systems provide."

Sharing Data

"In the early 21st century, computing will become a pervasive technology, more noticeable by its absence than its presence," observes Joel Birnbaum, vice president and general manager of Hewlett-Packard's information architecture group. "The impact on both users and the structure of the computing industry will be profound. Multivendor, cooperative computing systems will be the norm."

Workgroup communications software, "groupware," is seen by many

computer industry leaders as a key trend. Groupware applications allow multiple computer users to share and edit word processing and other types of documents.

Jay Yesselman, manager of product marketing for Access Technology of Natick, Mass. (a CompuServe company), believes that groupware will save businesses untold hours of wasted energy. "Instead of dealing with photocopies, Post-its and handwritten scrawls, users will be able to punch up documents and notes on their workstations almost instantly," he predicts. "Groupware has the potential to bring the team spirit back to the computer-based office."

Larry Moore, vice president of Lotus Development Corp.'s communications products division, believes "Group communications means more than just the ability to share information—it's the participation in the creative process that starts when people have the information they need. Group com-

munications will be one of those tools we'll wonder how we ever got along without."

Global Networks

But while networked computers running groupware may eventually draw us closer together, William Joy, vice president of research and development for Sun Microsystems, feels that the era of the desktop computer may be coming to an end. "There is no reason the computer is on the desk or is fixed in any physical location. What we're seeing is a trend worldwide for things to become detached—sort of the emergence of nomadic people returning full-circle in history."

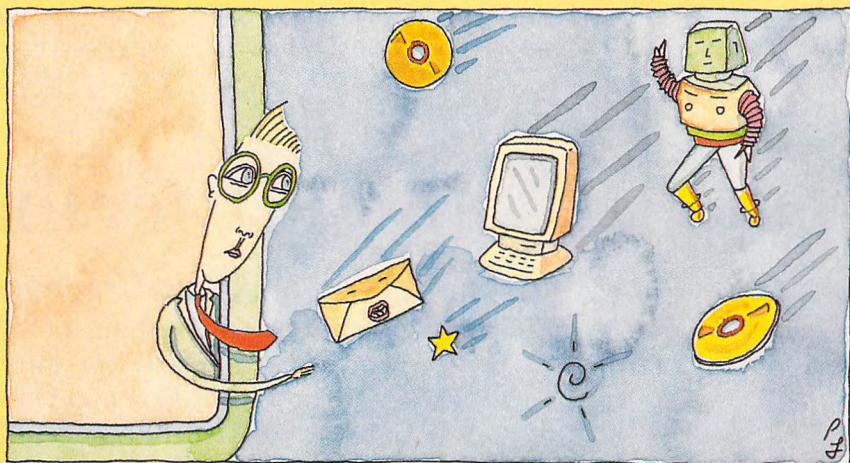
Dennis Crumpler of XcelleNet also sees a future in which people will compute on their own with compact, portable systems. But he notes that individuals will also have the ability to link up with other users whenever the need arises. "With the advent of wide-area networks that span broad geographic

areas, telecommunications and networking will blend into a single, cohesive technology," he notes.

Mike Weiner of Microlytics believes networking will turn portable and international. "The growing network of cellular telephones and the declining size and power needed from portable phones will make the built-in cellular modem a reality. And the price of air-time for cellular service will come down low enough to be affordable for computer use. This will be one of the major breakthroughs in the technology that will give everyone instant access to the vast, growing global network."

"Computing in the year 2000 will be radically different from today," Weiner notes. "It will change much more than planes or cars or telephones."

John Edwards is a contributing editor of CompuServe Magazine. His CompuServe User ID number is 70007.412.



Peeking Around the Corner Online

Interested in the future of computer communications? A number of CompuServe forums can help you get a solid grip on the world of tomorrow.

If you're intrigued by the trend toward smaller and more portable computers, check out the forum that's associated with your favorite laptop system. The Macintosh Communications Forum (GO MACCOMM), IBM Hardware Forum (GO IBMHW), Epson Forum (GO EPSON), Tandy Model 100 Forum (GO M100SIG), Toshiba Forum (GO TOSHIBA) and Zenith Data Systems Forum (GO ZENITH) are all home to active and enthusiastic portable computer experts.

Graphic User Interfaces are discussed in the Microsoft Windows Forum (GO MSWIN) as well as in the Hewlett-Packard Forum (GO HP) and the various Macintosh forums (GO MACINTOSH).

If the concept of advanced networks and "groupware" sounds intriguing, pay a visit to the Ask3Com Forum (GO ASKFORUM), Banyan Forum (BANFORUM), Novell Forums (GO NOVELL), IBM Communications Forum (GO IBMCOM), Macintosh Communications Forum (GO MACCOMM) or Lotus Words & Pixels Forum (GO LOTUSB).

No More Ant Farms—Ever

► Coming up with a winning science project ain't what it used to be.

From the window you watch the truck pull up at the home of your neighbor, the rocket scientist. Gingerly the driver unloads a small box labeled "radioactive" and a big box marked "rats." The screen door slams; a small child and a large cat eagerly dash out. "Mom! Dad! My science project is here!"

You glance at your child's project—nine ping-pong balls orbiting a styrofoam sun on yellow cocktail toothpicks—pick up a hammer and smash it to pieces.

If that about describes your experience with school science projects, clip this article and shellac it to the refrigerator. The baking soda volcano is passé; today's winner is bottling antimatter in the garage, and for very high stakes. Science fairs no longer mean just a little gold star, they're often a student's grade for the entire quarter—or the ticket to college and the scholarship money

to stay there.

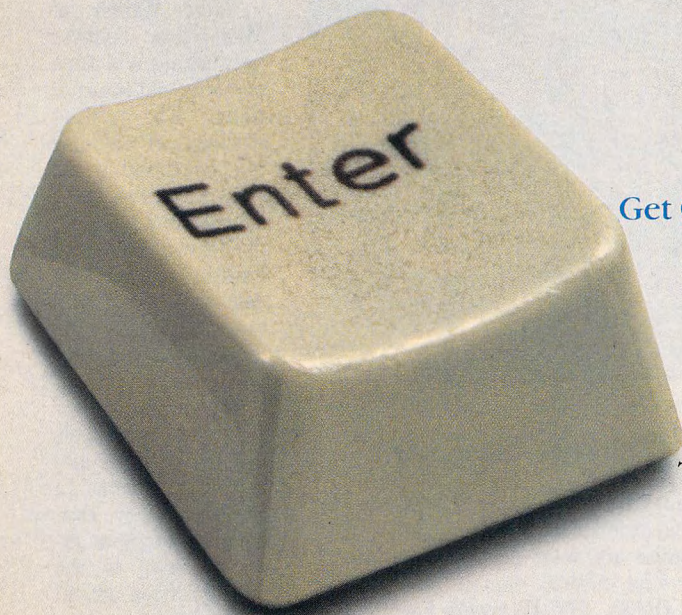
But where can low-tech kids with loving but low-tech parents go for help? If they can get their hands on a modem, the answer is CompuServe. (See "Where to Ask or Poke Around," page 42.)

Ben Wolkomir wanted to study Jupiter for his sixth-grade project. His dad, Mike, a Milwaukee area physician, hangs out on the Astronomy Forum (GO ASTROFORUM), so the two logged on and kicked around some ideas. They came up with a plan to measure the distance of four large moons from Jupiter and then calculate the time it took each to orbit the planet by observing through a telescope how long it took to return to a set spot. From a forum library, they got a shareware program that graphically displayed the position of each moon for any date and time, and used it to confirm which ones they were observing.

"The members of the forum were very helpful, especially the editors of *Sky & Tele-*

scope magazine and several school teachers who participate in the forum," says Mike Wolkomir. "The project was a major success. Ben was able to determine the orbital periods within 2 percent to 12 percent, based on Voyager observations. His project has been shown at the North Central Region Astronomical League Convention and at the Milwaukee Astronomical Society open houses."

Thirteen-year-old Joe Robinson of Vero Beach, Fla., won Best of Show at his science fair with a project on the biodegradation of petroleum products. "The National Technical Information Service was a critical resource," says his father, Peter Robinson. "We were able to get papers from Norway and Germany that were not available anywhere else." Joe now keeps a folder in his father's Executive News Service (ENS) area to stay up to date on the latest oil spills and what's happening in biodegradation. "He's now setting up his project for this year, and part of



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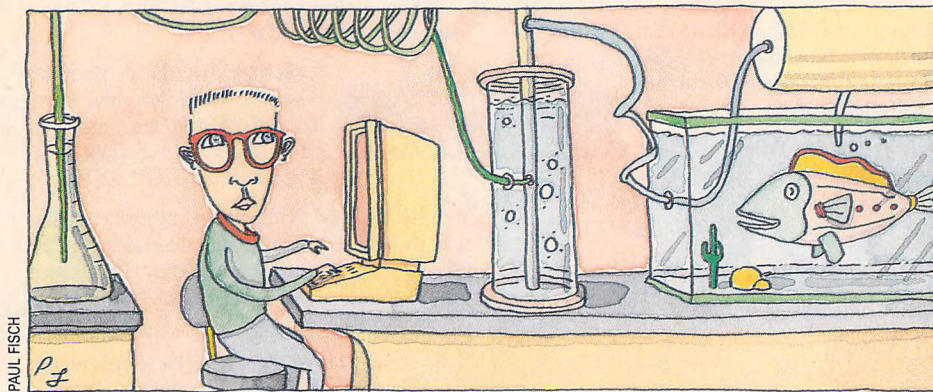
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his strategy is to correspond with the organizations he's become familiar with through CompuServe," says Robinson.

The Science/Math Forum (GO MATH) is an excellent place to start if you're a science fair novice. The teachers and scientists there have helped many a kid find testable hypotheses, experiments, references and suppliers. They also offer tips on proper experiment design, protocol, presentation and organization. Sysop Emory Kimbrough and science fair judge Tom Le Compte offer advice online for developing an experiment.

"Our most-asked question is 'What should I do my experiment on?'" Le Compte says. "We send those with such questions to a file

full of science fair topics in Library 0 (TOPICS.TXT) and that is usually the last we hear of them. It's a shame really. From the student's point of view, there's a lot of expertise here over a wide range of fields. For us, it's a lot more fun to answer questions like 'Why does a stream of water bend toward a charged rod?'"

Le Compte, who occasionally acts as judge at school science fairs, also has a list of projects that *won't* impress judges: Models of the solar system, because there's no experimentation involved; demonstrating which light bulb lasts the longest (it's rare that a single bulb burns out in the time allotted); and

determining which meteorologist is the most accurate. "Parents often end up collecting the data and the students manage to escape without learning anything about weather and climate," he says.

Pupils who want to use the forum need to do some homework before they log on, says Kimbrough. "The good students are already somewhat organized before they visit the forum and thus can pose specific and productive questions for our members." On the first visit, a student should post a message like: "I'm interested in how plants growing wild in the city are different from plants growing wild in the forest. How could I do a project on this?" Or, "I read an article on chaos that was really neat. Are there any chaos experiments that a high school student

could do?" Or even, "Here are three topics I have in mind. Which do you think is the best?"

Visiting the forum well before the project deadline is a must, Kimbrough adds. It allows time for fuller discussion of the topic and for the student to follow through on members' suggestions.

Above all, don't log on and expect a computer to do all the work. If you're stumped, ask a forum member or sysop for help.

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Where to Ask or Poke Around

These areas specialize in science:

AAMSI Medical Forum. Why do people have different blood types? Can blue-eyed parents have a green-eyed baby? Ask the doctors online. (GO MEDSIG) *

Academic American Encyclopedia. Groliers puts a springboard to science online for just \$7.50 for one month, \$29.95 for six. (GO AAE) *

American Sunspot Program. Data on solar flares and sunspots can help pupils study the star that keeps us warm. (GO SUNSPOT)

Aquaria and Tropical Fish Forum. Who lived in this sea shell? Which plants clean aquariums best? Ask the ichthyologists. (GO FISHNET)

Astronomy Forum. Scan the skies for ETs, photograph the planets or invent your own

asteroid. (GO ASTROFORUM)

Aviation Forum. A flock of pilots will explain just how lift, thrust and drag make a glider fly, a balloon float or a jet plane zoom. (GO AVSIG)

PERSONAL BUSINESS

The Electronic Mall. You're going to need a few things to get started: Gardening supplies? A computer? Software? Reference books? Electronics? (GO MALL) *

Executive News Service. Clip and file news stories on your topic as they appear on the AP and UPI news wires, and in Reuters Financial Report, *The Washington Post* and OTC NewsAlert. (GO ENS) *

NewsGrid. Search NewsGrid for items from national and international news wires. Key words bring up stories from the past seven days. (GO NEWSGRID)

The Good Earth Forum. Folks here trade rare seeds, recipes for making plant dyes, plans for solar devices and ideas on growing healthier plants. (GO GOODEARTH)

The Great Outdoors Forum. Conservationists, cave explorers, hydropower and pollution experts, geologists and members of Trout Unlimited are found here. (GO OUTDOORS)

HamNet. Forum members can help you assemble your first crystal radio, listen in on a space station or find out why radios crackle in a storm. (GO HAMNET)

Iquest. Scan scores of technical abstracts for the latest data on metallurgy, air pollution, pharmaceuticals, biotechnology, nuclear waste and more. (GO IQUEST) *

National Technical Information Service. The government shares its info on who's doing which research and development and engineering studies. (GO NTIS) *

Network Earth. If you share a concern for ecology, find out what other Earth watchers are doing. (GO EARTH)

Photography Forum. You can build a camera from a cigar box, learn how a lens works or find out why colored filters change a photo. (GO PHOTOFORUM)

Science/Math Forum. Pros share their lab secrets: How do you formulate a hypothesis? Where can you buy live toads? Your project bombed; what went wrong? (GO MATH)

Space Forum. What are moon rocks made of? How do solar sails work? Where can I buy satellite photos? Just ask. (GO SPACE) *

There may be a surcharge associated with services denoted with an asterisk (*).

Maura J. Mackowski is a free-lance science and business writer based in St. Louis. Her CompuServe User ID number is 76004,2243.

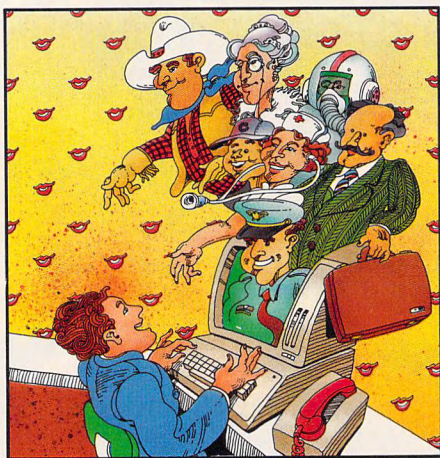
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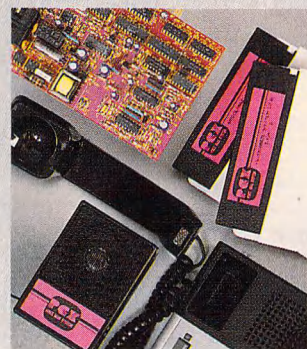
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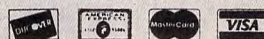
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For additional *CompuServe Magazine/Online Today* reviews published during the past two years and illustrations of reviewed products, refer to the key word-searchable buyer's guides in Libraries 5 and 6 of the OLT Forum (GO OLTFORUM). Use Section 5 of the OLT Forum message board for discussion and questions of the reviews and related products.

HARDWARE

Fax and a Modem Together

The EZ-Fax48 and EZ-FaxMODEM from Calculus Inc. turn an IBM computer into a fax machine. Each board runs from an internal slot. The EZ-Fax48 is a full-featured fax board that can send and receive fax transmissions while the computer is used for other tasks. The EZ-FaxMODEM can be used to send fax transmissions and as a standard 2400-baud modem. Reviewer James Moran says that both boards do everything their manufacturer claims; he particularly likes the EZ-Fax48 board. He suggests that the EZ-FaxMODEM is less useful because it will not receive fax transmissions. *GO OLT-3735*

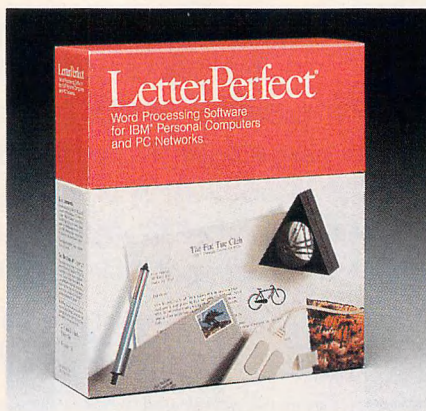
Draw, Don't Point

The ADB MousePen from Appoint is a replacement for the mouse included with every Macintosh computer with an Apple Desktop Bus connector. It overcomes the problems that many users face when they try to use a mouse as a drawing instrument. The MousePen is shaped like a fat pen and, according to reviewer Anthony Watkins, it fits comfortably in the user's hand. Watkins found that the MousePen was useful for some tasks but that a standard mouse is better for others. His only complaint about the MousePen is that the computer must be turned off each time the user wants to switch from pen to standard mouse or back. *GO OLT-3745*

SOFTWARE

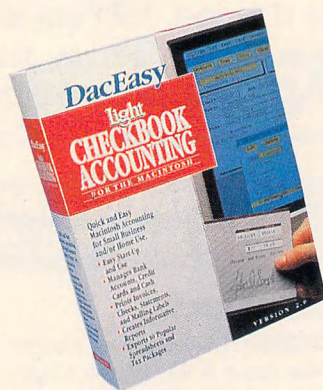
New and Improved dBase IV

Ashton-Tate's dBase IV version 1.1 for IBM computers is smaller, faster, and easier to use than the previous version. Reviewer William J. Lynott admires this version, and says it contains features the 1988 version should have had. He says this version requires less memory, runs faster and seems to be virtually bug-free. It is also easier to use for non-professionals than the earlier version of this famous database manager. *GO OLT-3755*



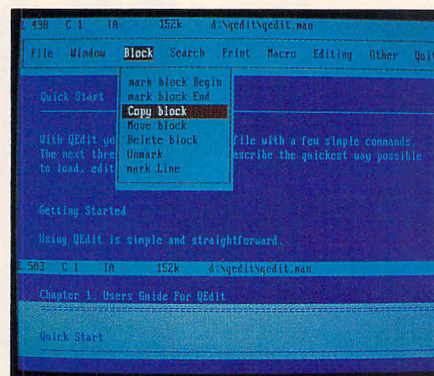
WordPerfect's Little Brother

LetterPerfect 1.0 from WordPerfect Corp. is an entry-level word processor for IBM computers. Reviewer James Moran says it accomplishes many of the same tasks as WordPerfect 5.0, but it uses less disk and memory space. It has all the features that most people require from a word processor and can be used comfortably on a laptop that doesn't have a hard disk. Because it uses the same file format as WordPerfect 5.1, Moran suggests that this is an ideal word processor for those who want to create WordPerfect files when they are away from the office. *GO OLT-3765*



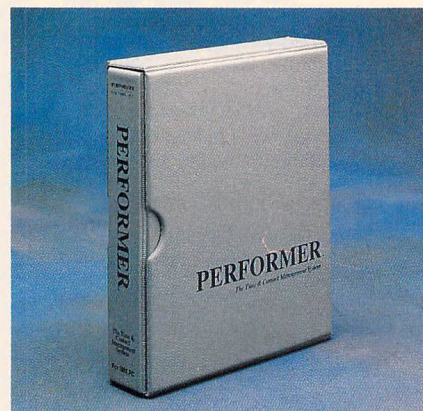
Personal Accounting on the Mac

DacEasy's Light 2.0 for the Macintosh is an accounting system that reviewer Franklyn Jones finds suitable for homes and small offices. He says that it is remarkably easy to understand and to use, and that it has a number of thoughtful touches that make it ideal for non-accountants. One of his favorite features is a "Why?" command that offers help when the program is unable to fulfill a user request. Jones says the program and manual will either teach the user a little about accounting or handle all of the details itself while it prepares a large variety of reports. *GO OLT-3775*



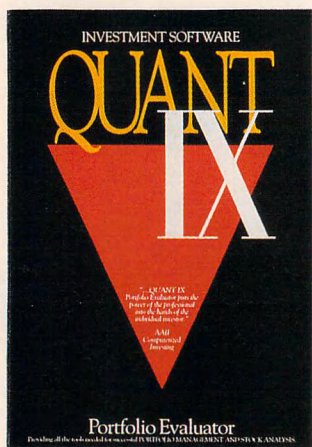
Fast, Flexible Text Processor

SemWare's QEdit Advanced 2.1 is a small and fast text processor for IBM computers that can be configured to act like almost any editor on the market. This shareware program features editing multiple files in separate windows, a large set of editing and file commands, and a configuration utility that lets the user assign any command to almost any combination of keys. It also includes a number of word processing features. It is also excellent for programmers. Reviewer Hardin Brothers said QEdit has found a permanent place on his computers. *GO OLT-3785*



Track Customers and Contacts

Performer 2.01 from Performer Systems helps IBM computer users keep track of customers, sales contacts and appointments. Reviewer Harry Green says the program will do almost everything a sales representative or other customer contact employee needs. It keeps notes on each contact, can create time and billing information, has an editor for writing memos and form letters, and will stay in memory while the user runs other applications. Green says the multiuser version of the program is even more valuable in an office where several employees use the same customer and contact database. *GO OLT-3795*



Professional Stock Analysis

Quant IX version 3.1b from Quant IX Software applies sophisticated, computerized analysis to any group of stocks the user chooses. This program, for IBM computers, takes large amounts of data about stocks (which can be downloaded from CompuServe) and uses it to produce several reports that will aid investors. Reviewer William J. Lynott says the program is best suited to serious investors who have several different stocks and stock portfolios that they want to track and analyze. He believes the program has improved much over earlier versions. *GO OLT-3835*

A Collection of Desk Accessories

Desk 3.03 from Zedcor Inc. is a collection of desk accessories for the Macintosh. It combines a word processor, spreadsheet, database manager, communications software, paint and draw program, and time-management software into one package. Reviewer Anthony Watkins says that many of these accessories are as powerful as a full-featured application program. But he also says users will probably want to use only the ones that don't duplicate the major application programs they already have. *GO OLT 3815*

Don't Wait for that Slow Printer

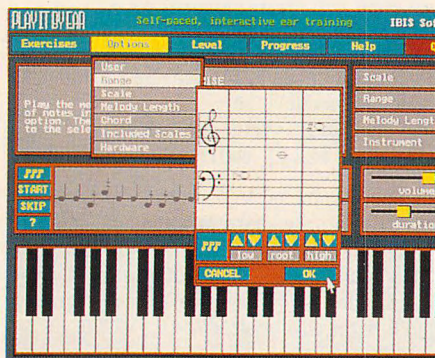
Budget Software's Disk Spool II version 2.05 keeps computers from waiting for slow printers. This shareware program captures text and graphics sent to a printer, stores them on disk, then sends the data to the printer while other programs are running. Reviewer Hardin Brothers says the program is easy to install and use. Its Control menu pops up over other applications to let the user adjust printing speed and view data waiting to be sent to the printer. Brothers faulted the program for its lack of expanded memory support, but otherwise found it very useful. *GO OLT-3825*

Organize Your Personal Records

Personal Record Keeper 1.1 from Professional Automated Systems lets IBM computer users keep track of virtually everything in their homes. This shareware program creates databases for a user's financial information, credit cards, loans, donations, business and professional contacts, and personal entertainment items such as tapes and CDs. Reviewer Christy Brothers found Personal Record Keeper easy to use but somewhat limited in its ability to manipulate the data she had stored in the program. *GO OLT- 3805*

Managing Daily Tasks

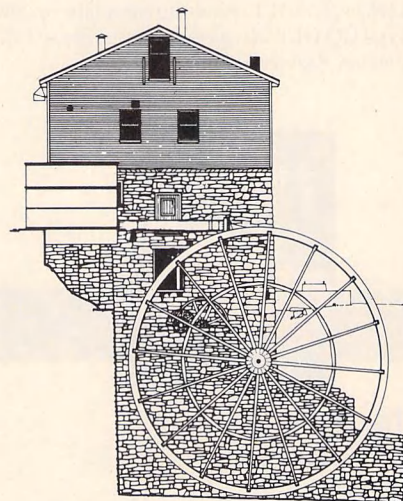
WetZoft Applications' Resident Task Manager 2.05, for IBM computers, is a memory-resident utility that keeps track of daily assignments and tasks. Each time the program pops up, it lists the number of assignments or tasks that are due. It also shows a list of pending tasks, when each was assigned and a short description of each. Reviewer Christy Brothers says this shareware program doesn't have all the advanced features of a full project manager or scheduling manager; still she found the program flexible and useful. *GO OLT-3845*



Learn Music with Your PC

Play It By Ear from Ibis Software is a musicianship training program for IBM computers. It teaches the user to recognize and produce melodies, scales and a wide range of chords. The program can work with the computer's built-in speaker, through a sound card, or with MIDI-based instruments. Reviewer Hardin Brothers says the program can teach as much as an ear-training class, but that users will still have to learn music theory on their own. *GO OLT-3855*

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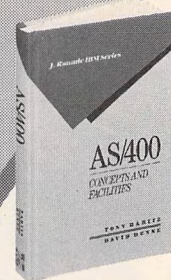


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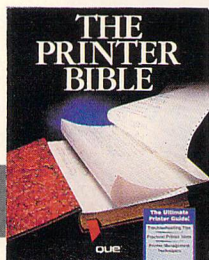


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Book Reviews

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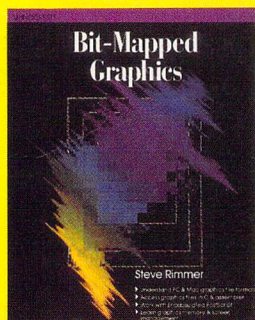
The Printer Bible

By Scott Foerster
Que Corp., 1990
682 pages, \$24.95 (softcover)

This book offers expert tips on printer knowledge, troubleshooting and management. Reviewer James Moran insists it will help alleviate some of the stress that goes with choosing, using and abusing (or being abused by) printers. *GO OLT-5940*

GO WB

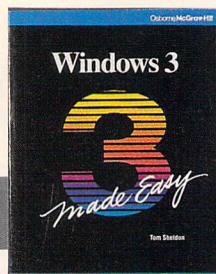
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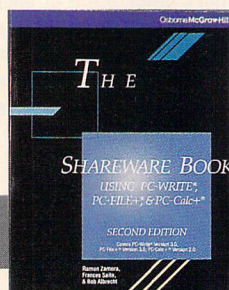
GO OLI for more information.



Windows 3 Companion

By Lori L. Lorenz and R. Michael O'Mara
Microsoft Press, 1990
519 pages, \$27.95 (softcover)

Predicting that this well-written text will be a big hit on the computer book market, reviewer Harry Green praises it for its level of detail, logical organization, superb screen shots and illustrations. *GO OLT-5910*



The Shareware Book: Using PC-Write, PC-File!, PC-Calc! (Second Edition)

By Ramon Zamora, Frances Saito, and Bob Albrecht
Osborne/McGraw-Hill Inc., 1990
744 pages, \$22.95 (softcover)

The second edition of this book delves into these three shareware leaders, offering users the most basic instruction as well as tips on advanced tasks. Reviewer Lindsay Van Gelder says if you own these programs, you'll want this book. *GO OLT-5920*

WordPerfect 5.1: The Complete Reference

By Karen Acerson
Osborne/McGraw-Hill Inc., 1990
1,327 pages, \$24.95 (softcover)

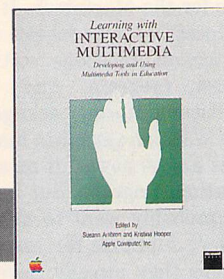
Praising the author for knowing more about WordPerfect than almost any other writer, reviewer William J. Lynott says this reference text is an ideal source for solving WordPerfect problems and learning how to complete tasks. The book is a complete guide to every menu, keystroke, command and feature in the program. *GO OLT-5930*



Inside CompuServe: The Easy Start Guide to Online Information and Communications

By Julie Anne Arca and Richard T. Lindstrom
New Riders Publishing, 1990
302 pages, \$29.95 (softcover)

A welcome addition to the short list of CompuServe reference books available, this text concentrates on getting the new user up to speed. Tips are offered on how to put the many navigation programs to good use, allowing novices to master CompuServe early. Reviewer Paul A. Gilster praises the book for filling a significant void and doing so with clarity and good sense. *GO OLT-5900*



Learning with Interactive Multimedia: Developing and Using Multimedia Tools in Education

Edited by Sueann Ambron and Kristina Hooper
Microsoft Press, 1990
400 pages, \$24.95 (softcover)

A compilation of 20 essays on HyperCard and the value of computer-based learning in a high school curriculum, this book is a collaboration between Microsoft Press and Apple Computer Inc. Reviewer Carole Houze Gerber recommends the text especially for teachers, but warns there is a bit of academic jargon. *GO OLT-5950*

Shop Connect-free Every
Wednesday in January

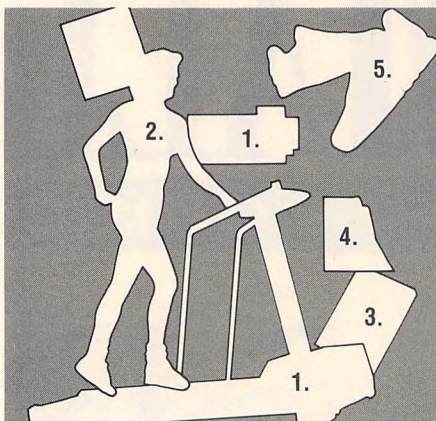
Browse the Mall's Valentine's
Gift Guide

New Last Minute Gift Guide
Now Available

GO MALL

SHOPPERS' GUIDE





1. Two Free Gifts with the Precor M9.1 Treadmill

Order the Precor M9.1 Treadmill online and get two free gifts: a free treadmill video and a free C.I.C. heart speedometer. The M9.1 features an electronic control panel that provides immediate feedback on your progress. Adjust speed from .5mph to 9mph.

From Push Pedal Pull Fitness. GO PPP
\$1,995, includes shipping and handling.

2. Lycra Exercise Funwear.

A figure-perfect outfit for working out. Multi-colored ribbon trim cotton/lycra top and matching cotton/lycra pants. Free catalog and automatic entry into Camelot's "London Trip for Two" sweepstakes with your purchase.

From Camelot London Lingerie Collection.
GO CLC
\$29.95 each.

3. Take Control of Cholesterol by Lifestyles.

On-screen prompts help you develop a plan for every member of the family. Determine your ideal intake of saturated fats, plan menus using 200 specially prepared recipes and individual food charts, track your daily intake, and find delicious alternative foods. For IBM and Macintosh.

From Computer Express. GO CE
Sale price: \$31.96.

4. Personal Computerized Body Fat Tester.

Used by doctors, Olympic trainers and fitness clubs, this easy-to-use computerized device instantly and accurately measures your percentage of body fat. It also allows you to monitor your general health and the progress of your diet.

From Hammacher Schlemmer. GO HS
\$249.50.

5. Men's and Women's Nike® Destiny Running Shoe.

A premier running shoe for serious runners and beginners alike. Durable nylon-and-suede uppers feature medial and lateral straps for enhanced stability. Duraplus lining. Deeply grooved rubber Waffle® outsoles provide outstanding traction. Also available, select running shoes from British Knights®, Reebok®, L.A. Gear® and Converse®.

From JCPenney. GO JCP
Sale price: \$34.99.



Who's the first CompuServe baby in 1991?



Long-stemmed chocolate roses. GO HH

Shop the entire Mall connect-free every Wednesday in January!

Attention all NEW parents!

The Electronic Mall® has a basket of goodies for the first baby born to a CompuServe member in 1991, including a squeezable stuffed animal from The Squishy Wishy Zoo (GO SW), Cosco Deluxe Baby Swing from Shoppers Advantage Club (GO SAC) and coffee to keep dad awake during those 4 a.m. feedings from Coffee Anyone??? (GO COF). For a complete list of prizes and how to enter your bundle of joy, GO MALL and select "The Mall's First Baby Contest."

Get a Jump on Cupid.

This year, get a jump on Cupid by shopping The Mall's Valentine's Day Gift Guide beginning Monday, Jan. 7. Featured online are more than 50 ways to say "I love you." Among the featured gifts are long-stemmed chocolate roses from Helen Hutchley's La Dolceria (GO HH), a dozen long-stemmed red roses from The Flower Stop (GO FS), gourmet chocolates from Godiva Chocolatier (GO GC) and lacy lingerie from Camelot London Lingerie Collection (GO CL). To shop the guide GO MALL.

Last Minute Gift Guide, at Your Service!

The Mall's Last Minute Gift Guide makes its debut Jan. 1. Showcased online are more than three dozen gifts suitable for a variety of occasions. All will be delivered within 72 hours of ordering. Browse all four categories: gifts for her, gifts for him, gifts for kids, and gifts for everyone. From birthday greetings to get well wishes, the Last Minute Gift Guide is at your service. To shop the guide, GO MALL.

Healthy Help, Toll-Free.

The AT&T 800 Directory puts thousands of health-related, toll-free numbers at your fingertips, connect-free. Browse listings for alcohol treatment centers, diabetic supplies, health resorts and spas, food addiction treatment centers, home health services, hair implants and transplants, prosthetic devices, sperm banks, wheel chair lifts and ramps, and more. Remember, connect time is always free. For healthy help toll-free, GO ATT.

GO 99 and Find It Fast!

Go online to order items pictured in *Go Mall* by typing 99 after any Mall Merchant's GO command. For example, select an item featured on the cover, type the merchant's GO command followed by 99 (i.e., GO JCP99) and zip to a list of featured products.

What the heck is "free connect"?

When you browse in participating merchants' online stores during sponsored **free connect** time, you pay **no** standard CompuServe connect-time rates while shopping in that store, although applicable communications surcharges remain in effect. An up-to-date list of **free connect** time always can be found online in "Free Shopping and Mall Events."

The price is right ... most of the time.

All prices mentioned in *Go Mall* are the most accurate prices available at press time. However, occasionally a printed price will be out of date.

Go Mall, published monthly in *CompuServe Magazine*, is a shoppers guide for The Electronic Mall, a service of CompuServe Incorporated. For more information call 614/457-8600.

Editors: Cindy Morgan, Denise Erwin Anderson and Pam Busch.
Art Director: Thom Misiak.
Design: Dorothy Hogan.

TREADMILL COURTESY OF BERRY'S BARBELL & EQUIPMENT CO.

A. Sierra Online for Games Galore.

Get set. Sierra, those fabulous folks who brought you Leisure Suit Larry, Space Quest, Police Quest, and the largest selling PC game of all time, King's Quest, have opened shop online. Now you can order your favorite Sierra games directly from the source: fantasy, adventure and simulation action games; arcade games and quality adventure games for children, such as Mixed Up Mother Goose; innovative productive software such as Smart Money and Sierra Online, the easiest-to-use modem software ever; and music cards, including the perennially popular Soundblaster. Plus loads of extras, like Police Quest and King's Quest T-shirts and Leisure Suit Larry beach towels.

Get new releases ASAP. Now in stock, and sale priced, are Thexder II: The Second Encounter and Fire Hawk from Game Arts, Red Barron and Rise of the Dragon from Dynamix, and, the just released and decidedly hot King's Quest V. Watch for King's Quest V coming soon on CD-ROM, too.

All shoppers are also invited to request a free copy of the colorful Sierra News Magazine. Packed with behind-the-scenes stories, technical tips and a sneak peek at what's ahead, it's a must for all fans. Also at your fingertips is information on how to contact customer service, technical support, Sierra's own bulletin board, and the 24-hour hint line.

For games galore and a whole lot more, visit Sierra Online today. GO SI.



A

B. The University of Phoenix Offers Online Degree Programs.

Imagine earning your MBA degree from an accredited university without leaving home. Imagine taking courses taught by accomplished professionals. Imagine a campus not bound by borders of location or time. Imagine no further. The University of Phoenix has taken education into the 21st century. Your PC is the doorway to an interactive university. Each student becomes a member of a small, supportive learning group that studies together and shares ideas on a daily basis.

Three degree programs are currently offered: master of business administration, master of arts in management, and bachelor of science in business administration. Each is composed of a sequentially structured set of courses.

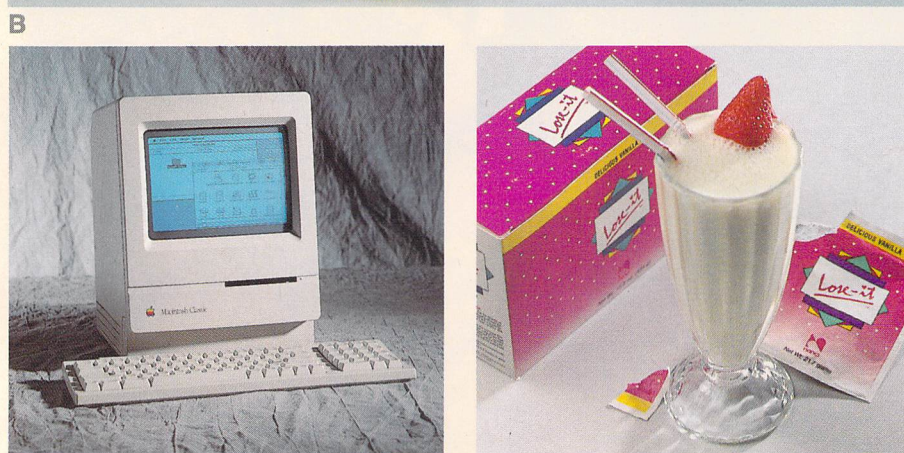
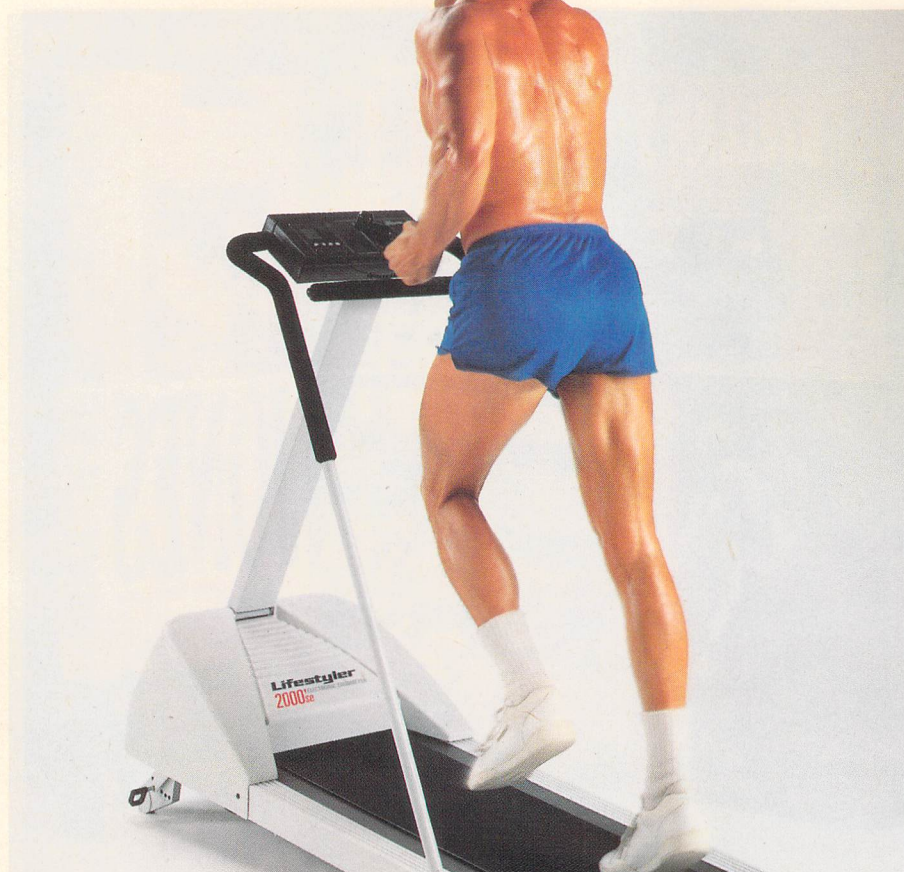
The University of Phoenix is accredited by the North Central Association of Schools and Colleges and the US Department of Education.

Intrigued? Take a tour of the campus online at The Mall. You'll find descriptions of each of the three degree programs. You'll also have the opportunity to request free brochures about the university or the program of your choice. Complete a short online questionnaire and a university representative will call you to discuss educational opportunities. Financial aid and Veterans Administration benefits are available to those who qualify.

To tour the campus today, GO UP.



B



DOLLARS OFF & HOT TICKETS

A. Sears' Best Selling Treadmill.

Sleek 1990s styling. Features include speed range from 1.5 to 5 mph, a 9-function ergometer console, 5-position incline system and safety switch to prevent accidental start-up. Full 3/4-HP AC motor. Tubular steel frame. 62 by 22 by 51 inches. Folds for storage. Warranted by Sears.

From Sears. GO SEARS

Sale price: **\$339.50.**

B. Fresh Florida Fruit on Sale

Get your vitamin C directly from the source — grove-fresh Florida oranges and grapefruits. Florida Fruit Shippers selects only the very best from the top 1 percent of the crop. All fruit is hand-picked, hand-packed and shipped express around the clock. Your fruit arrives bursting with sweet, delicious juice loaded with healthy vitamin C. Order the three month plan: 3½ bushel pack each month for three months.

Sale Price: **\$75.85**, includes shipping and handling.

Sale price: **\$149.70**, for the six month plan. Includes shipping and handling.

From Florida Fruit Shippers. GO FFS

Type 99 after any merchant's GO command and zip to a list of their pictured products.

C. The Macintosh Classic System.

Introducing the most affordable Macintosh ever! With built-in AppleTalk networking capabilities, the Mac Classic can function as an individual productivity system or as a cost effective member of a network environment. Among its many features:

- Macintosh Classic CPU with Microtech 50 MB hard drive, the Apple SuperDrive, 4 MB of RAM, keyboard and mouse
- HyperCard and MultiFinder software
- Virex anti-virus software by Microcom
- Adobe type manager
- 6-outlet surge protector
- 10 diskettes
- Diskette storage box
- Mouse pad

Sale price: **\$1,599.**

Or only \$42.29 per month based on 48-month FMV lease.

From CDA Computer Sales. GO CDA

D. Nanci Lose-It Sampler and Savings.

Discover Nanci's delicious, nutritionally sound weight loss system. Order a Lose-It sampler online for only \$2, including shipping and handling. Save 30 percent on all Nanci products during January, too, including Lose-It, Gain-It and Super Fiber Capsules.

From The Healthy Living Store. GO HL

14 Kt. Gold Puffed Scallop Hoop Earrings.

3.8 grams of gold. Measures 1.5 in. by 1 in. Made in the USA. Item number E1085.

List price: \$119.

Members price: **\$59.**

Not a member? Sign up online today!

From Shoppers Advantage Club. GO SAC

A. CompuServe Made Easy Guides

When you order the self-paced study guide, *CompuServe Made Easy* (\$39.95), you can also order any one of the other three guides at half-price. Other guides cover forums, online research and personal investing. From CompuServe Store. GO ORDER

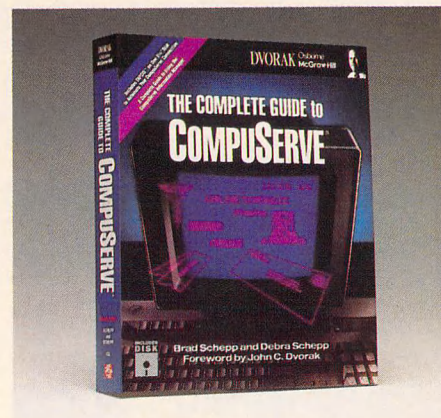
B. The Complete Guide to CompuServe by Brad Schepp and Debra Schepp.

New! Complete startup information, service descriptions, and time-saving tips. Includes TAPCIS access software on 5.25 inch disk to automate your CompuServe connection. 650 pages.

From McGraw-Hill Book Co. GO MH
\$29.95



A



B

C. The Really Creamy Yogurt Cheese Funnel and Snack to Your Heart's Content Cookbook.

It really works! The Funnel turns yogurt into a healthful, low-fat cream cheese with 90 percent less fat and 66 percent fewer calories. The secret? A micro-sized mesh lining that selectively removes the whey from the yogurt (\$9.99). Plus, a cookbook featuring more than 150 quick and easy low-fat, low-cholesterol snack recipes using the "secret ingredient," yogurt cheese (\$9.95).

From The Chef's Catalog. GO CC

Type 99 after any merchant's GO command and zip to a list of their pictured products.



GO CC99

C

FOR MEMBERS ONLY**D. Eight CDs for the Price of One!**

Wanted: new members! Join The CD Club online and get eight CDs for the price of one. Easy electronic enrollment allows you to select from online listings in a variety of categories. Complete club membership details online. Deals for current members too.

From The CD Club. GO CD

Free Book for New Members.

Join the small Computer Book Club online and receive absolutely free, a copy of *How To Get The Most Out of CompuServe, 4th Edition*, a \$21.95 value. New members choose from five sets of computer books, with a retail value of up to \$104.80. Pay only \$4.95, for any set. Book sets offered include: The On-Line Communications Library, The IBM Power User's Library, The MS-DOS Library, The Macintosh User's Library and The dBASE Programmer's Library. Complete membership details online.

From The Small Computer Book Club.
GO BK



D



A



B



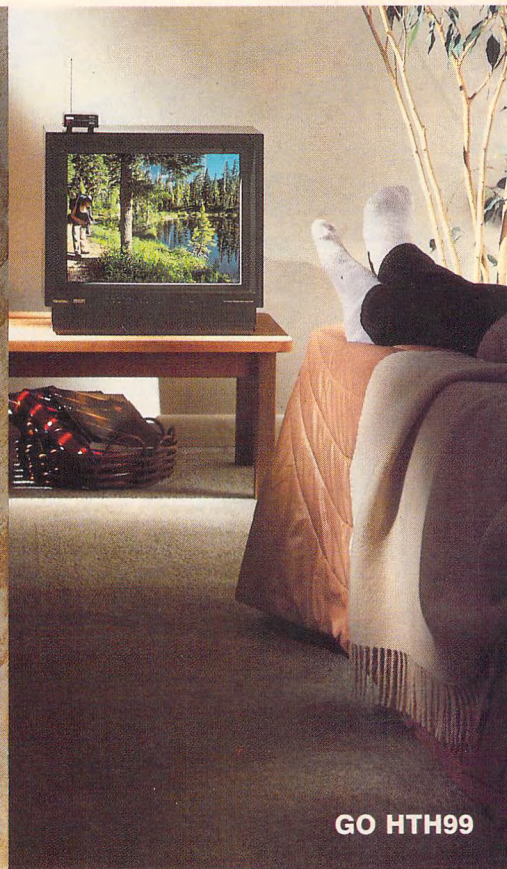
C



D



E



GO HTH99

A. Kinderpony.

The museum's exclusive rocking horse lovingly brought to life from a 1910 color lithograph from Vienna. Sanded to a smooth finish, and the paint is non-toxic. Children will rock on this pony for generations to come. 21 inches high. Ages 18 months to 4 years.

From Museum of Fine Arts, Boston. GO FA
Non-member price: **\$75.**
Member price: **\$67.50.**

B. Distance Estimator.

Pocket-size AccuTape II ultrasonically measures from 1 to 50 feet at the touch of a button. Imperial or metric. Permanent life-time lithium battery.

From Sharon Luggage and Gift. GO SL
\$35

C. MS-101 Short Wave Radio.

The smallest full-featured nine-band radio by Sangean. Features seven short wave bands, AM/FM and FM stereo, and includes stereo headphones. Fits into the corner of your briefcase or purse. Measures 4.875 inches by 2.75 inches. One year warranty.

From Miltrobe Electronics. GO MI
\$87.95

D. Airgometer 2 Air Resistance Exerciser.

Provides variable resistance that increases as you pedal faster. Features a Bionix™ fitness computer that monitors your pulse, target pulse, time, speed, distance, cadence, caloric use. Steel frame has front rollers for easy moving and storage.

From Sears. GO SEARS
Sale price: **\$299.99.**

E. Gemini Wireless Videocaster®.

An in-home, state-of-the-art video broadcast system that sends picture and sound from any video source (such as a VCR, cable-ready TV, camcorder, or security camera) in one room to a TV set in another room—without wires! Watch movies in the bedroom from the VCR in the family room. See how baby's doing in the nursery. Check who's coming up the walk. Works up to 120 feet. FCC approved.

From The Heath Company. GO HTH
\$119.95

Type 99 after any merchant's GO command and zip to a list of their pictured products.

A. The 1991 Mercury Cougar XR7 ... This Cat is Top Dog.

A car designed for performance that you don't have to be a pro to drive. The XR7 is a manageable and highly satisfying automotive driving experience. From its fuel-injected 5.0L H.O. V-8 powerplant, the only V-8 in its class, to its four-wheel anti-lock disc brakes, the Cougar XR7 is true to its mission of keeping you in control. Free brochure.

From Ford Motor Company. GO MERCURY
Type 99 after any merchant's GO command and zip to a list of their pictured products.

Tax-Free Opportunities from Dreyfus.

Under tax reform, tax-exempt bonds are among the few remaining sources of tax-free income available to Americans. Dreyfus offers a family of funds that are exempt from federal taxes. Investors enjoy the advantages of low minimum investment, no sales load to invest and no penalties to redeem, and free unlimited checkwriting in amounts of \$500 or more. Plus, freedom to exchange fund shares, at no cost, for shares of other Dreyfus no-load funds, including stock, bond and money market funds. Order free prospectuses.

From Dreyfus. GO DR

B. See Security Pacific For Fiscal Fitness.

Resolve to get your finances back in shape in the new year. Take advantage of investment opportunities. Consolidate debts and loans. Open an IRA or Keogh to combat taxes. Security Pacific's Private Reserve offers an unsecured, no-fee line of credit at low, competitive rates. Apply directly online.

From Security Pacific. GO SEC

C. The Source for Porsche.

Calling all Porsche owners! Price Motor Cars offers an online part inquiry service and a free accessory catalog. Members can also shop online for select accessories, including a car-care kit (\$29.95); car covers with twin mirror pockets available for the 924, 928, 930 and 944 models (\$109.95); and, pictured here, Porsche license plate with logo (\$57.95). Sign-up for the close-out mailing list online, too.

From Price Motor Cars. GO PRC

AT&T Offers Business Solutions.

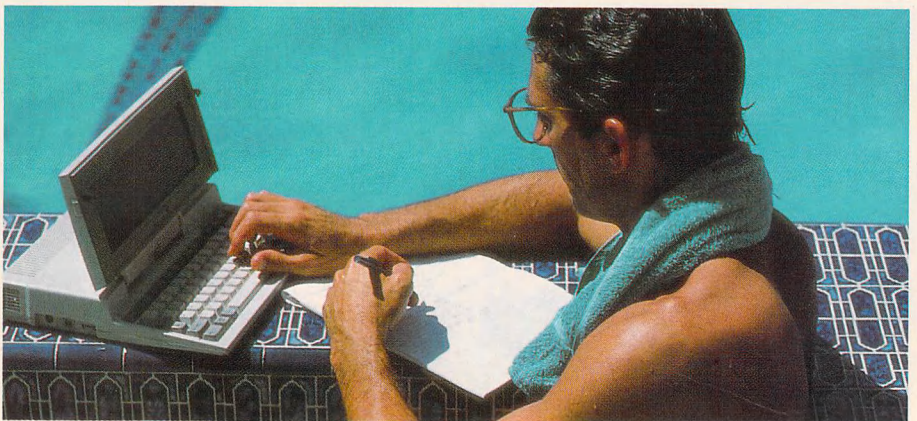
Discover how AT&T can save you time and money if you work at home. Featured online is a short needs analysis quiz. Also featured, information on a wide array of AT&T services, including AT&T Reach Out® America, AT&T Reach Out® World, AT&T ProSM WATS, AT&T Alliance® Teleconferencing, AT&T USA-Direct®, AT&T Mail and more. Request a free AT&T Calling Card online, too.

From AT&T Home Office Resources.
GO HRO

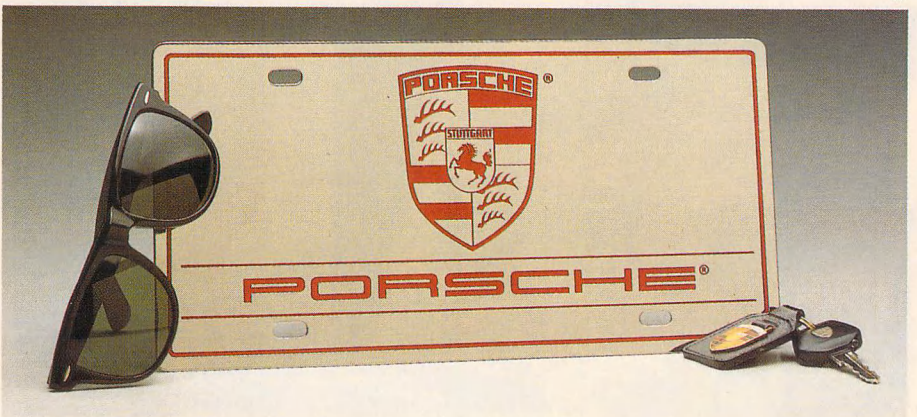


GO LM99

A



B



C

**A. Sentry Insulated Desk-Side Safe.**

Inexpensive insurance against disaster by fire, water or pilferage. Lightweight and compact. Manufacturer-tested to 1,550 degrees Fahrenheit. Holds 175 3.5-inch diskettes or 110 5.25-inch diskettes. Exterior is 13.875-inches wide by 15.25-inches deep by 11.875-inches high.

From The Stationery Center. GO SC
\$369

B. Safeware Introduces Fix:ItSM for the PC.

New Safeware Fix:ItSM combines mechanical breakdown insurance with insurance from external threats. One policy protects against wear and tear, mechanical and electrical breakdown, fire, theft, power surges, vandalism, natural disasters and accidental damage. Your computer, monitor, printer, software and more identified in a list of scheduled items are covered. Subject to underwriting and availability by state. Details and toll-free ordering online.

From Safeware. GO SAF

C. Test Drive 3: The Passion.

Test-drive three prototype race cars: Chevrolet CERV III, a 378-HP Pinnafarina and a Lamborghini Diablo. Pit your prowess against the clock or against two computer-controlled cars. Features instant replay, 360-degree chase car view, day and night driving, and more. For IBMs and compatibles.

From Software Discounters International.
GO SDI
Sale price: \$39.

**D. Family Care by Lifestyles.**

Compiled by a faculty of practicing pediatricians, simple "yes" and "no" answers give you understandable pediatric advice. Helps you identify and describe symptoms to your doctor. Alerts you to serious symptoms requiring immediate care. Remember, no source of information can or should replace your family physician. Available for IBM and Mac.

From Computer Express. GO CE
Sale price: \$31.96.

Type 99 after any merchant's GO command and zip to a list of their pictured products.

Macintosh Ilx Upgrade.

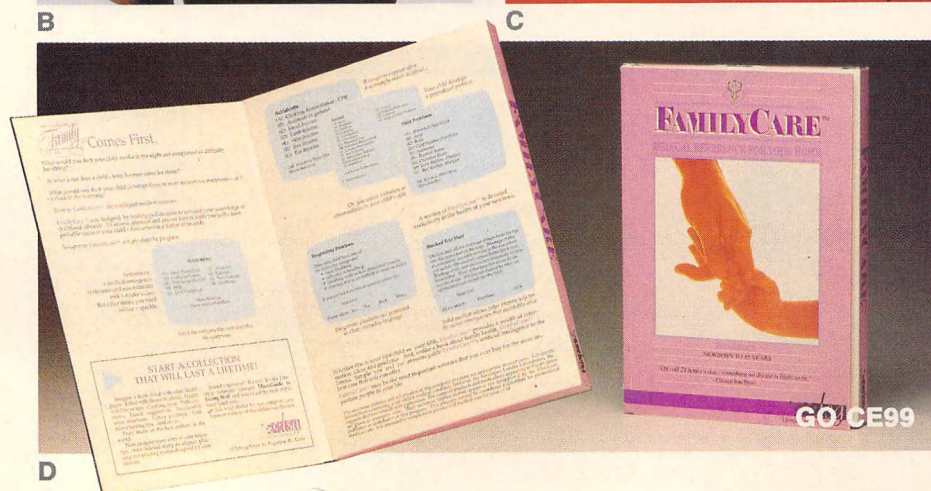
Exclusively at CDA Computer Sales. A new upgrade by DayStar Digital gives speedy Ilx performance to the Mac Ilx. DayStar adds the necessary socket that allows for adding accelerators. To eliminate down time, CDA in conjunction with DayStar will, overnight, send you a new socketed Ilx motherboard and the PowerCard of your choice. Simply return your Ilx motherboard and install the new one.

From CDA Computer Sales. GO CDA
\$29.95.

Newly Updated Island of Kesmai Guide (1990 Edition)

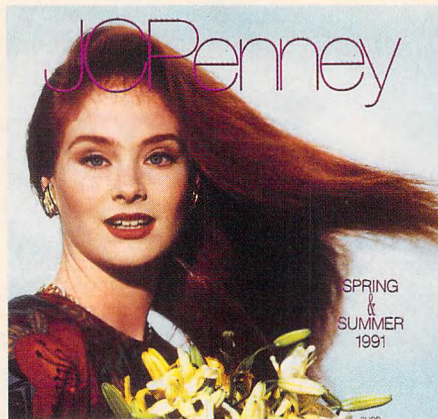
For both the novice and experienced player of the Island of Kesmai game.

From CompuServe Store. GO ORDER.
\$17.95



A. JCPenney Spring/Summer Catalog.

JCPenney's Spring/Summer 1991 Catalog is here. More than 1,200 pages of spring fashions, home furnishings, electronics and more. Order the catalog online for \$5 and receive a \$5 certificate good toward your first purchase. Request a charge application online, too. From JCPenney. GO JCP



A

B. C. Savings on Contact Lenses and Supplies.

Eye care at low discount prices. Solutions, enzymes and cleaning systems for all major brands, including A.O. Sept, Bausch & Lomb, Allergan, Softmate and Unisol. Order a spare pair of lenses, too. Consult the online prescription price chart and see the savings for yourself. Register your prescription today. From Contact Lens Supply. GO CL

Type 99 after any merchant's GO command and zip to a list of their pictured products.



B

Home Water and Air Analysis Test Kits.

Test your home water and air with Aqua Associates home analysis. Each test includes a prepaid mailer for results from an EPA certified laboratory. Tests offered include: water analysis for toxic and cancer-causing chemicals (\$49.50); water analysis for general water chemistry (\$59.50); water analysis for total coliform bacteria (\$29.50); water analysis for radon (\$30); air analysis for radon (\$30). From Court Pharmacy. GO RX



C

Tunturi "O" Ring Ankle/Wrist Weights.

Constructed of soft, stretch-knit fabric. Adjustable straps with hook-and-loop closures. From Push Pedal Pull Fitness. GO PPP 2-pound pair \$8.99, 4-pound pair \$12.99. Includes shipping and handling.

D. OAG Spotlights Sporting Holidays.

Looking for adventure? ZapoDel's Adventure Atlas features more than 8,000 tours ranging from river trips down the Amazon to mountain treks in Nepal. Are you a skier? See Ski Resort Information before you go. Details on conditions, base, trails open and more are updated daily for all major US and Canadian resorts. Do you like to golf, scuba or play tennis? Consult the Leisure Travel Directory and search OAG's database of properties by activity, type of facility or destination.

Capsule descriptions of these and more than a dozen other travel services are highlighted. Remember: Official Recreation Guide's Mall store is not surcharged. Browse at standard connect rates. Request a free guide on how to use OAG, too.

From Official Airline Guides. GO OA

Free Information on French Ski Resorts.

Ski the site of the 1992 winter Olympics. Request free full-color brochures online for Val D'Isere and Meribel. Find fax and phone numbers online for hotel reservations. Information on Adventure World, La Plagne and Tignes available, too.

From France Info USA. GO FI



D

PHOTO COURTESY OF SWISS NATIONAL TOURIST OFFICE

The Electronic Mall Directory is designed to assist you with information about each of our merchants. All entries contain three lines as follows:

Merchant Name [GO Command]
Description of products/services
Billing options Countries served

An example entry would look like this:

ABC NOVELTY STORE [ABC]
Books, knick-knacks, collectibles
VI/MC/AM/CSH US/CD/JP/OT

You may visit the ABC NOVELTY STORE by using the quick reference word (GO ABC) at any CompuServe Information Service ! prompt.

Billing options codes indicate the methods of payment the merchant accepts as follows:

VI - VISA	SC - Merchant's own store card
MC - MasterCard	COD - COD
AM - American Express	CSH - Cash, check, money order
DI - Diners Club	DB - Direct bill
DIS - Discover Card	NA - No billing applies (Advertiser only)

Country codes indicate the countries the merchant is able to ship to as follows:

US - United States	JP - Japan
CD - Canada	OT - Other foreign countries

Catalog options for merchants offering catalogs are indicated by the following codes.

■ Offers free print catalog.	● Credits cost of print catalog toward purchase.
* Denotes electronic order form for use with print catalog.	† Denotes new merchant.

A

AIR FRANCE [AF] ■
Information on tours, sights and scenes.
VI/MC US/CD

ALAMO RENT A CAR [AL]
Information on rates, benefits, locations.
NA US/OT

AMERICAN CLOTHING [AC]
Levi jeans and casual wear, Docker slacks.
VI/MC/AM/COD/CSH US/CD/JP/OT

ARTWEAR/OUTWEST [AO] ■ *
Hand-designed shirts and jewelry.
VI/MC/AM US/CD/JP/OT

AT&T HOME-OFFICE RESOURCES ONLINE [ATT]
Technology that brings success home.
NA US/CD/JP/OT

AT&T TOLL-FREE 800 DIRECTORY [ATT]
Thousands of toll-free numbers always free of connect-time fees.
VI/MC US

AUSTAD'S GOLF SHOP [AU] ■ *
Golfing accessories, apparel, gifts.
VI/MC/AM/DIS US

AUTOMOBILE INFORMATION CENTER [AI]
Wholesale/retail prices from 1978.
VI/MC US/CD

AUTOQUOT-R [AQ]
Vehicle price quotation service.
VI/MC/AM US

B

BRADY BOOKS [BB]
PC books, utilities, software.
VI/MC US/CD

BRETON HARBOR BASKET CO. [BH]
Gift baskets, gourmet foods, bath and skin-care products.
VI/MC US/CD/JP/OT

BROOKS BROTHERS [BR] ■ *
Fine men's and ladies' apparel and accessories.
VI/MC/AM/DI/SC US/CD/JP/OT

BUICK MAGAZINE [BU] ■
Free car information, customer service. Always connect-free.

C

CAMELOT LONDON COLLECTION LINGERIE [CLC]
Alluring Lingerie, Swimwear and Dresses.
VI/MC/CSH US/CD/CD

CLUB [CD] *
Compact disk ordering club.
DB US

CDA COMPUTER SALES [CDA] ■ *
Hardware, printers and accessories.
VI/MC/AM/DIS/CSH US/CD/JP/OT

CHECKFREE CORP. [CF]
Electronic banking and bill payment service.
VI/MC/AM US

CHEF'S CATALOG, THE [CC] ■ *
Gourmet cookware and kitchen accessories.
VI/MC/AM/DIS US

CLASSICAL MUSIC CLUB [CM] *
Classical music ordering club.
DB US

COFFEE ANYONE ???™ [COF]
Original computer coffeehouse, gifts.
VI/MC US/CD/JP/OT

COMPUSERVE STORE [ORDER]
Merchandise, literature and software.

COMPUTER EXPRESS [CE] *
PC software, hardware, accessories.
VI/MC US/CD/JP/OT

COMPUTER SHOPPER [CS]
Computer product bargains and information magazine.
VI/MC/DB US/CD

CONTACT LENS SUPPLY [CL]
Fast delivery of replacement lenses and more.
VI/MC/CSH US

COURT PHARMACY [RX]
Full-service pharmacy and gift shop.
VI/MC/AM/DI/DIS/COD US/CD/JP/OT

CRABTREE & EVELYN [CR] *
Beauty products, sweets, gift packs.
VI/MC/AM US/CD

CREATE-A-BOOK [CK]
Fun books that make your child a star.
VI/MC US

D

DIRECT MICRO [DM] *
Discount computer disks and supplies.
VI/MC/COD US/CD/JP/OT

DISCOUNT MUSIC SUPPLY [DMS] ■ *
Guitar effects and accessories.
VI/MC/COD US/CD/JP/OT

DOW JONES & CO. [DJ]
Business and financial periodicals.
VI/MC/AM US/CD

DREYFUS CORP. [DR]
Mutual funds and investment information.
VI US

E

EXECUTIVE STAMPER [EX] ■ *
Rubber stamps, engraved gifts.
VI/MC/AM/DI/DIS US/CD/JP/OT

F

FLORIDA FRUIT SHIPPERS [FFS] ■
Premium fruit and gift shippers.
VI/MC/AM US/CD/JP/OT

FLOWER STOP [FS] ■
Flower and gift delivery service.
VI/MC/AM/DI/DIS US

FOOD AMERICA [FO]
Gourmet delicacies, desserts from around the USA.
New! GO FO for details

FORD MOTOR CO. [FORD] ■
Car and truck information, dealer locator.
VI/MC US/CD

FRANCE INFO USA [FI]
A kiosk of information about France.
VI/MC/AM/COD/DB US/CD/JP/OT

G

GIMMEE JIMMY'S COOKIES [GIM]
Gourmet cookies, custom orders.
VI/MC/AM/DIS US/CD/JP/OT

GODIVA CHOCOLATIER [GC] ■ *
Gourmet chocolate and gifts.
VI/MC/AM US

A GUIDE TO INCORPORATING [INC]
Nationwide incorporating service.
NA US

H

H&R BLOCK [HRB]
The income tax people.
NA US

HAMMACHER SCHLEMMER [HS] ■ *
Gifts, unique and unusual products.
VI/MC/AM/DI US/CD/JP/OT

THE HEALTHY LIVING STORE [HL] ■ *
Gifts, environmental & health products.
VI/MC/AM/CSH US/CD

THE HEATH COMPANY [HTH] ■ *
Home Security and Automation.
VI/MC/AM/SC US/CD

HELEN HUTCHLEYS LA DOLCERIA [HH] ■ *
Chocolate, nuts and candy.
VI/MC/AM US

J

JCPENNEY [JCP] ■ *
Apparel, furnishings, electronics.
VI/MC/AM/SC US

L

LASER'S EDGE, THE [LE]
Your one-stop laser video store.
VI/MC/AM/DIS US/CD/JP/OT

LINCOLN ELECTRONIC SHOWROOM [LM] ■ *
Continental, Town Car and Mark VII.
VI/MC US/CD

M

MACFRIENDS [MF] ■ *
Macintosh hardware and products.
VI/MC/AM/DIS/COD US/CD/JP/OT

MACUSER [MC]
Save 58 percent and receive free gift.
VI/MC/DB US/CD

MACWAREHOUSE [MW] ■ *
Macintosh hardware, software and equipment.
VI/MC/COD US/CD/JP/OT

MARYMAC INDUSTRIES [MM]
Official Radio Shack dealer.
VI/MC/AM/DIS/CSH US/CD/JP

MAX ULE DISCOUNT BROKERAGE [TKR]
Brokerage and financial information retrieval.
CSH US/JP/OT

MCGRAW-HILL BOOK CO. [MH] ■ *
Business, finance and computer books.
VI/MC US/CD/JP

MENTOR TECHNOLOGIES [MN]
Authorized CompuServe training.
VI/MC US

MERCURY ELECTRONIC SHOWROOM [LM] ■ *
Cougar, Sable, Tracer, etc....
VI/MC US/CD

MICROWAREHOUSE [MCW] ■ *
Hardware, software and equipment for PCs.
VI/MC/COD US/CD/JP/OT

MILTROBE ELECTRONICS [MI] ■ *
Consumer electronics, tools, gifts.
VI/MC/CSH US/CD

MONEY'S FINANCIAL MARKET [MFN]
Personal finance tools from Money.
VI/MC/AM US

MUSEUM OF FINE ARTS, BOSTON [FA] ■ *
Gifts and classic reproductions.
VI/MC/AM US/CD/JP/OT

MUSIC ALLEY ONLINE [MAO]
Mixers, synthesizers, keyboards, etc.
VI/MC/COD US/CD

N

NEWSNET [NN]
Specialized business news database service.
NA US/CD

NISSAN MOTOR CORP. IN THE USA [NI] ■
Nissan cars, trucks, accessories.
VI/MC US

O

OFFICIAL AIRLINE GUIDES [OA] ■
Information on online services; air and hotel guides.
VI/MC US/CD

ONLINE STORE [OS]
Computer accessories, hardware.
VI/MC/AM US

P

PAUL FREDRICK SHIRTS CO. [PFS]
Classic shirts from the tailor to you.
VI/MC/AM/DI US

PC/COMPUTING [PCC]
Save 58 percent and receive free gift.
VI/MC/DB US/CD

PC MAGAZINE [PM]
Save 54 percent and receive free gift.
VI/MC/DB US/CD

PENNY WISE OFFICE PRODUCTS [PW] ■ *
Full range of brand-name office products.
VI/MC/AM/COD/DB/CSH US

PEPPERIDGE FARM [PF] ■ *
Gourmet cookies, candies, gifts, etc.
VI/MC/AM/DI/DIS US

PRICE MOTORCARS [PRC]

Auto accessories and gifts of distinction.
VI/MC/AM/DIS US/CD/JP

PUBLISHERS CLEARING HOUSE [PUB]

Magazine subscriptions at low prices.
VI/MC US

PUSH PEDAL PULL FITNESS [PPP] ■ *

Professional home exercise equipment.
VI/MC/AM/DIS US

R**RADIO DOCTORS [RD] ■ ***

Music on CD and cassette.
VI/MC/AM/DIS US

RECORD AND TAPE CLUB [RT] ■ *

Record and tape ordering club.
DB US

RENT MOTHER NATURE [RM] ■ *

Nature's gifts, leasing programs, etc.
VI/MC/AM US/OT

S**SAFWARE COMPUTER INSURANCE [SAF] ■**

High-tech equipment insurance.
VI/MC US/CD/JP/OT

SEARS [SEARS] ■ **

Electronics, home-office supplies, Nintendo and videos.
DIS/SC/CSH US

SECURITY PACIFIC [SEC]

Online low-interest credit application.
US

SHARON LUGGAGE AND GIFTS [SL] ■ *

Luggage, fine leather goods and unique gifts.
VI/MC/AM US/CD/JP/OT

SHOPPERS ADVANTAGE CLUB [SAC]

Discount shopping club.
VI/MC US

SIERRA ONLINE [SI] †

Software Games and More.
VI/MC/AM/DIS US/CD/JP/OT

SMALL COMPUTER BOOK CLUB [BK]

Quality computer books.
DB US/CD

SOFTWARE DISCOUNTERS INTERNATIONAL [SDI]

Software for a wide range of computers.
VI/MC US/CD/JP/OT

SOME THINGS SPECIAL UNIQUE BOUTIQUE [SP] ■ *

Unique gifts and computing accessories.
VI/MC/AM/DIS US/CD

SPRINGER-VERLAG [SV] ■ *

An array of computing and programming books.
VI/MC/AM/DIS US/CD

SQUISHY WISHY ZOO [SW]

Lovable, huggable stuffed animals. New! GO SW for details.
VI/MC US/CD/JP/OT

STARNET'S CATCH OF THE DAY [NET]

Fresh Gulf and Caribbean Seafood. New! GO NET for Details.

STATIONERY CENTER, THE [SC] ■ *

Office supplies, furniture, etc.
VI/MC/AM/DIS/COD US/CD/JP

T**TALL TAILS [TT]**

Supplies and gifts for your pet.
VI/MC/COD US/CD/JP/OT

TIME-LIFE BOOKS, MUSIC AND VIDEOS [TL]

Books, music and video series.
VI/MC/AM US

TRW CREDENTIALS [CRE]

Know the details of your credit status.
VI/MC/AM US

TSR GAMES SHOPPE [TSR] ■ *

Adventure, fantasy games and accessories.
VI/MC US/CD/JP/OT

U**USA TODAY [UT]**

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VI/MC/AM US

UNIVERSITY OF PHOENIX [UP] †

Business Degree program online.

W**WALDEN COMPUTER BOOKS [WB]**

Computer books and accessories.
VI/MC/AM US/CD/JP/OT

WALTER KNOLL FLORIST [WK]

Plants, flowers and gifts via FTD.
VI/MC/AM/DI/DIS/DB US/CD/JP/OT

WILLIAMS & EEDEN GARDEN CENTER [WE] ■ *

Flowers, plants and garden tools.
VI/MC US/CD

WORDSWORTH BOOKS [WO] ■ *

Books, new titles, catalogs.
VI/MC/AM/DIS US/CD/JP/OT

Y**YES! BOOKS AND VIDEOS [YB] ■ ***

A unique collection of books and videos.
VI/MC/AM US/CD/JP/OT

Merchants by Department

APPAREL/ACCESSORIES

AC Americana Clothing
AO Artwear/Outwest ■ *
AU Austad's Golf Shop ■ *
BR Brooks Brothers ■ *
CLC Camelot London Collection Lingerie
JCP JCPenney ■ *
PFS Paul Fredrick Shirts Co.
SL Sharon Luggage and Gifts ■ *

ARTS/MUSIC/VIDEO

CD CD Club *
CM Classical Music Club
DMS Discount Music Supply ■ *
LE The Laser's Edge
MAO Music Alley Online
FA Museum of Fine Arts, Boston ■ *
RD Radio Doctors ■ *
RT Record and Tape Club *
SEARS Sears ■ **
TL Time-Life Books, Music and Videos
YB YES! Books and Videos ■ *

AUTO

AL Alamo Rent A Car
AI Automobile Information Center
AQ Autoquot-R
BU Buick Magazine
CI CIGNA Insurance
FORD Ford Motor Co. ■
LM Lincoln ■ †
LM Mercury ■ †
NI Nissan Motor Corp. in the USA ■

PRICE MOTORCARS

BB Brady Books
CS Computer Shopper
CK Create-A-Book
DJ Dow Jones & Co.
MH McGraw-Hill Book Co. ■ *
MC MacUser
MFM Money's Financial Market
PCC PC/Computing
PM PC Magazine
PUB Publishers Clearing House

SI Sierra Online ■ †
BK Small Computer Book Club
SV Springer-Verlag ■ *
TL Time-Life Books, Music and Videos
UT USA Today
WB WaldenCOMPUTERbooks
WO Wordsworth ■ *

BUSINESS/FINANCE

ATT AT&T Home-Office Resources Online
ATT AT&T Toll-Free 800 Directory
CF CheckFree Corp.
DR Dreyfus Corp.
DJ Dow Jones & Co.
INC A Guide to Incorporating
HRB H&R Block
TKR Max Ule Discount Brokerage
MFM Money's Financial Market
NN NewsNet
SEC Security Pacific
CRE TRW Credentials
UP University of Phoenix †

CLUBS/MEMBERSHIPS

CM Classical Music Club *
CD CD Club *
RT Record and Tape Club *
SAC Shoppers Advantage Club *
BK Small Computer Book Club
TL Time-Life Books, Music and Videos

COMPUTING

CDA CDA Computer Sales ■ *
ORD CompuServe Store
CE Computer Express *
CS Computer Shopper
DM Direct Micro *
HTH The Heath Company ■ *
MF MacFriends ■ *
MC MacUser
MW MacWarehouse ■ *
MM Marymac Industries
MCW MicroWarehouse ■ *
OS Online Store
PCC PC/Computing
PM PC Magazine

SAF Safeware Computer Insurance ■
SI Sierra Online ■ †
SDI Software Discounters International
SP Some Things Special Unique Boutique ■ *
SV Springer-Verlag ■ *
WB WaldenCOMPUTERbooks ■ *

GIFTS/FLOWERS/GOURMET FOODS

ATT AT&T Toll-Free 800 Directory
BH Breton Harbor Basket Co.
CC The Chef's Catalog ■ *
CLC Camelot London Collection Lingerie
COF Coffee Anyone™ ???
CK Create-A-Book
FFS Florida Fruit Shippers ■
FS Flower Stop ■
FO Food America
GIM Gimme Jimmy's Cookies
GC Godiva Chocolatier ■ *
HS Hammacher Schlemmer ■ *
HL The Healthy Living Store
HH Helen Hutchleys La Dolceria ■ *
FA Museum of Fine Arts, Boston ■ *
PF Pepperidge Farm ■ *
RM Rent Mother Nature ■ *
SL Sharon Luggage and Gifts ■ *
SP Some Things Special Unique Boutique ■ *
NET Starnet's Catch of the Day
SW Squishy Wishy Zoo
WK Walter Knoll Florist
WE Williams & Eeden Garden Center ■ *

HEALTH/BEAUTY

BH Breton Harbor Basket Co.
CL Contact Lens Supply
RX Court Pharmacy
CR Crabtree & Evelyn ■ *
HL The Healthy Living Store ■ *
PPP Push Pedal Pull Fitness ■ *

HOBBIES/TOYS/PETS

SEARS Sears ■ **
SW Squishy Wishy Zoo
TT Tall Tails
TSR TSR Games Shoppe ■ *
WE Williams & Eeden Garden Center ■ *

INFORMATION/SERVICES

ATT AT&T Home-Office Resources Online
ATT AT&T Toll-Free 800 Directory
ORD CompuServe Store
MN Mentor Technologies
SAF Safeware Computer Insurance ■
SEC Security Pacific
CRE TRW Credentials
UP University of Phoenix

MERCHANDISE/ELECTRONICS

BR Brooks Brothers ■ *
CC The Chef's Catalog ■ *
ORD CompuServe Store
RX Court Pharmacy
HS Hammacher Schlemmer ■ *
HTH The Heath Company ■ *
JCP JCPenney ■ *
MI Miltrope Electronics ■ *
SEARS Sears ■ **
SAC Shoppers Advantage Club

OFFICE SUPPLIES

DM Direct Micro *
EX Executive Stampler ■ *
PW Penny Wise Office Products
SEARS Sears ■ **
SC The Stationery Center ■ *

SPORTS/LEISURE

AU Austad's Golf Shop ■ *
HS Hammacher Schlemmer ■ *
PPP Push Pedal Pull Fitness ■ *

TRAVEL/VACATIONS

AF Air France ■
ATT AT&T Toll-Free 800 Directory
FI France Info USA
OA Official Airline Guides ■
SL Sharon Luggage and Gifts ■ *

FREE SHOPPING & MALL EVENTS

Free Shopping

Connect time is free every Wednesday in January at every Mall merchant, too. Browse to your heart's content on January 2, 9, 16, 23 and 30. Remember: connect time is always free at AT&T Toll-Free 800 Directory (GO ATT), Buick Magazine (GO BU) and CompuServe Store (GO ORDER). Plus, shop the following stores without paying standard connect-time fees on select weekends. Connect time is free from 12:01 a.m. EST Saturday through 11:59 p.m. EST Sunday. For an up-to-the-minute schedule of free shopping, GO MALL and select "Free Shopping & Mall Events."

Jan. 1 to 5

Shop Penny Wise Office Products free of connect fees every day. GO PW

Jan. 1 to 31

Shop the CD Club free of connect fees during the whole month of January. GO CD

Shop The Heath Company connect-free every day in January too. GO HTH

Jan. 5 and 6

Brooks Brothers GO BR

CDA Computer Sales GO CDA

Discount Music Supply GO DMS

Dreyfus GO DR

The Heath Company GO HTH

MacWarehouse GO MW

Max Ule Discount Brokerage GO TKR

MicroWarehouse GO MCW

The University of Phoenix GO UP

WaldenCOMPUTERbooks GO WB

Wordsworth GO WO

Jan. 5 to 13

Shop MacFriends free of connect fees every day. GO MF

Jan. 6 to 12

Shop Security Pacific free of connect fees every day. GO SEC

Jan. 6 to 19

Shop Sears free of connect fees every day. GO SR

Jan. 12 and 13

Americana Clothing GO AC

CDA Computer Sales GO CDA

Coffee Anyone??? GO COF

Discount Music Supply GO DMS

Dreyfus GO DR

MacWarehouse GO MW

MicroWarehouse GO MCW

WaldenCOMPUTERbooks GO WB

Jan. 13 to 19

Shop Penny Wise Office Products free of connect fees every day. GO PW

Jan. 15 to 22

Shop JCPenney free of connect fees every day. GO JCP

Jan. 19 and 20

CDA Computer Sales GO CDA

Dreyfus GO DR

MacWarehouse GO MW

MicroWarehouse GO MCW

WaldenCOMPUTERbooks GO WB

Jan. 26 and 27

Austad's Golf Shop GO AU

CDA Computer Sales GO CDA

Dreyfus GO DR

MacWarehouse GO MW

MicroWarehouse GO MCW

WaldenCOMPUTERbooks GO WB

Jan. 27 to Feb. 2

Shop Penny Wise Office Products free of connect fees every day. GO PW.

Also, shop Sears for free. GO SEARS.

WaldenCOMPUTERbooks Offers Guides for Beginners.

Calling all beginners! If you have a new system or a new software program, or even if you've never touched a PC at all, stop by WaldenCOMPUTERbooks. Showcased online are the best in beginners guides as selected by Waldenbooks' expert buyers. Among the highly recommended titles: First Book of Personal Computing (\$16.95), First Book of Lotus 1-2-3/G (\$14.95), Learn BASIC Now for IBM or Apple Mac (\$39.95), and Quick and Easy Macintosh Guide (\$21.95). Remember: connect time is free every weekend. GO WB

Free Gift with \$100 Purchase at Breton Harbor Basket Company.

Breton Harbor Basket Company is offering a free gift with a \$100 purchase of skin care products. Accumulate \$100 worth of skin care purchases over one year and receive a free 8 ounce bottle of Citrus Cleansing Lotion (an \$8 value). Choose from moisturizers, toners, facial masks, lotions, body wash, and sunscreen products all with aloe. GO BH

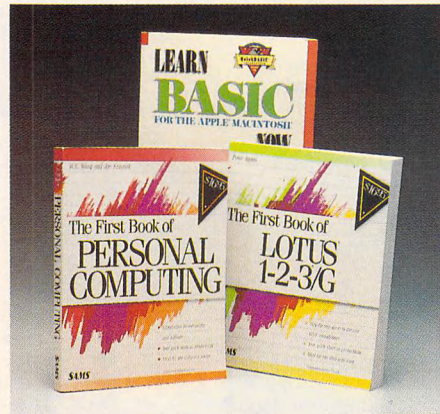
The 1991 Buick Roadmaster Estate Wagon.

Buick welcomes the return of a great name in its heritage—Roadmaster. Pictured here, the 1991 Roadmaster Estate Wagon is an aerodynamic eight-passenger vehicle powered by fuel-injected 5-liter V-8 engine delivering 170 horsepower. Complete specifications and options listed online. Request a free color brochure, too. Remember, connect time is always free at Buick.

From Buick Magazine. GO BU



Find an 800 number connect free. GO ATT



Start with the best. GO WB



Order a basket of skin care. GO BH



A great name in Buick heritage. GO BU

Shoppers Guide

SOFTWARE DISCOUNTERS INTERNATIONAL



The #1 Software Source for Hundred's of Thousand's of Computer Owners!

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Ends: January 13 11:59 P.M.

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Advertiser's Directory

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Autoquot-r	59
BMG	40, 41
Checkfree	C-2
ENS	21
GE Ridge	59
IQuest	24, 29, 31
Marymac	59
McGraw Hill	45
Money Magazine	37
Official Airline Guides	4, 5
On-Line Store	43
PaperChase	26
PhoneFile	1
Quick & Reilly	36
SDA	59
Shoppers Advantage	C-3
Spear Financial	5
Support Group, Inc.	35
Supra	C-4
Traveler's Access	9
University of Phoenix	35
Waldenbooks	46

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *CompuServe Magazine's* electronic version of the traditional reader inquiry card. To request additional information about products or services described in *CompuServe Magazine*, simply access CompuServe and type GO OLI at any prompt.

CompuServe Page OLI-1
COMPUERVE MAGAZINE ADVERTISERS
ONLINE INQUIRY (OLI)

1. OLI Instructions
2. CompuServe Magazine Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *CompuServe Magazine* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe
COMPUERVE
ADVERTISERS/OLI

Page OLI-160
MAGAZINE

1. Jan. 1991 Advertisers
2. Dec. 1990 Advertisers
3. Nov. 1990 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, GO OLI-280 and select the appropriate listing, such as February Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
REVIEW LISTINGS/PRINT EDITION

1. Jan. Hardware Listings
2. Jan. Software Listings
3. Jan. New Product Listings

Shopper's Guide

GO OLI-70 to get information about *CompuServe Magazine's* mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information

***Note:** Additional requests during the same session will not require you to re-enter your name and address.

UPDATE



Stormy Weather? Check New Maps

The same weather maps you see on TV are now available online. CompuServe and Accu-Weather Inc. have joined to provide you with eight full-color images including satellite pictures, current and forecast conditions, and temperature maps. Black-and-white maps are also available for lower resolution PCs. The maps are surcharge-free. GO MAPS



Visit CompuServe at MacWorld 1991

CompuServe will be an exhibitor at the 1991 MacWorld show in San Francisco, Jan. 10-13. The CompuServe booth will be located in Moscone Hall, where CompuServe Information Manager for the Macintosh and CompuServe Navigator will be demonstrated. Special discount prices will be available on these software products and the CompuServe Almanac.

CompuServe members are invited to try the Executive News Service (ENS) through January without the need to be Executive Option subscribers. Scan current news from the Associated Press, United Press International, *The Washington Post* and other news sources. Follow a current event of interest by setting up a clipping folder. For more information, select menu option 10 from the NEWS menu or see the ENS advertisement on page 21. GO ENS

Robin Lane will be the January Celebrity of the Month in the Macintosh New Users/Help Forum. Lane is president and CEO of Microseeds Inc., which develops and distributes the popular Redux, InitPicker and Screen Gems programs. He will be taking questions and joining in discussions in the "Robin Lane" section of the forum. GO MACNEW

Shop The Electronic Mall connect-free every Wednesday in January. Members are invited to browse in over 100 Mall stores on Jan. 2, 9, 16, 23 and 30. Visit old favorites or the Mall's newest stores: Northwest Naturally (GO NW) and Sierra Online (GO SI). Connect time is free every day in January at these stores: The Heath Company (GO HTH), The CD Club (GO CD), Buick Magazine (GO BU), AT&T 800 Directory (GO ATT) and CompuServe Store (GO ORDER). For a complete schedule of free shopping and Mall events, GO MALL.

Hooked on aquaria? The Fifth Annual Winter Weekend Workshop (WWW/5) on FISHNET will be held Feb. 3-5. The Workshop features talks by noted aquarists, roundtable discussions, and trivia contests. Participation earns forum visitors "fishy bucks" redeemable at the Sunday auction, and a conference room will be dedicated to manufacturers and vendors. For details, GO FISHNET.

During January, use the Medicine & Allied Health SmartSCANS in IQuest and the \$5 scan charge is waived. Four medical SmartSCANS are available in this offer: Medical Research, Pharmacology, Nursing and Allied Services, and Consumer Health. With SmartSCAN, one search scans several databases in the selected health topic. Additional charges apply for retrieving scanned data. GO IQUEST

First-time users of Health Database Plus will receive up to a \$5 usage credit for surcharges incurred in their first session in January. Health Database Plus features full-text articles from more than 75 lay-oriented health journals such as *Prevention* and *Psychology Today*. Nearly 52,000 articles, most published in the last two years, are online. GO HDB

NEXT MONTH • Desktop Publish or Perish: Drawing on Online Expertise • The Right Impression: Picking a Printer • Bond Voyage: Navigating an Investment Mine Field • Czech, Please: A Walking Tour of Historic Prague • Share the Fantasy: The Game Based on Baseball

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* Conditions of our Low Price Guarantee and Double Warranty policies can be read online.

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PC Magazine 6/28/88

"Real bargains...operated at least as well as higher priced competitors, and throughput ...proved identical." *CompuServe Magazine* 1/90

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MacInTalk 6/89

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JOHN C. DVORAK, *PC MAGAZINE*, 6/28/88

"...it performed as well as a much more expensive modem." *AmigaWorld* 10/89

"It's inexpensive, Hayes™-compatible, and works fine." *Macworld* 11/88

"I can highly recommend the Supra 2400 modem as providing excellent value for the price." *ST Informer* 2/88

"The SupraModem 2400™ has the multiple benefits of Hayes compatibility, reliability, affordability, and compact physical size."

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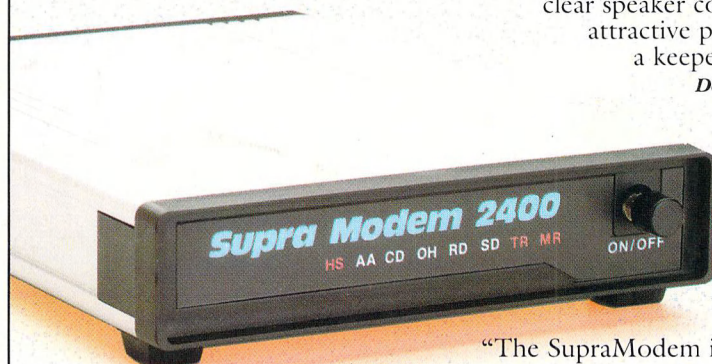
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